

# ***Final Report***

## **Tompkins County Freight Transportation Study**



**Prepared For:**  
**Ithaca-Tompkins County Transportation Council**  
**April, 2002**

*imagine* imagine it **DONE.**



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# **CHAPTER 1 – Introduction**

## **1.1 Purpose of Study/ Study Goals**

The need for a county-wide Freight Transportation Study was identified in the Ithaca – Tompkins County Transportation Council’s (ITCTC) 2020 Long Range Plan and the Northeast Subarea Transportation Study (NESTS).

The general goal of this Freight Transportation Study is to obtain new data on freight movements in and through the County, from which a freight transportation plan can be developed. This plan would provide for efficient movement of goods into, out of, and through Tompkins County, while minimizing impacts on truckers, local businesses, shippers, and residents.

To meet the study goals, the following objectives were identified:

- collect and analyze new data on freight movements throughout Tompkins County;
- assess the suitability of existing travel routes to handle freight movements;
- determine significant areas of concern;
- identify alternative truck travel routes and strategies;
- assess impacts of these alternative routes; and
- develop mitigation strategies

## **1.2 Study Process**

The study was completed in three phases, with a technical memorandum prepared to document each phase:

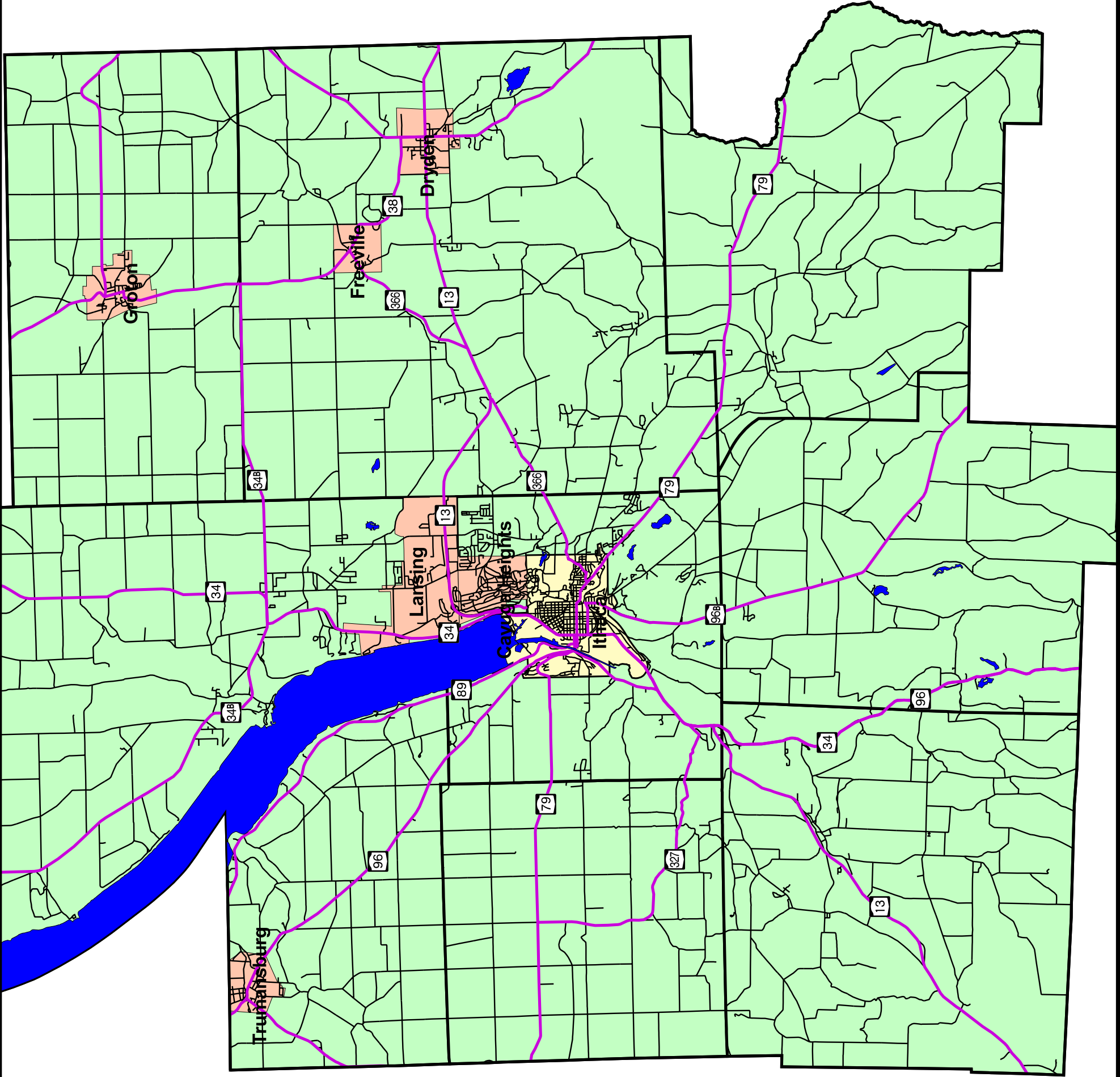
Phase 1	Document Existing Freight Movements
Phase 2	Develop Alternative Truck Routes and Strategies
Phase 3	Assess the Impacts of the Alternatives

Each memorandum was reviewed by the study review committee, and made available to the public. This report presents a combination of the three technical memoranda. Public meetings were scheduled at the ends of each of the three phases.

## **1.3 Study Area Boundary**

The study area for this project includes all of Tompkins County. See *Figure 1*.

Figure 1. Study Area



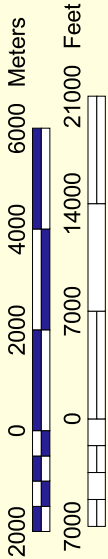
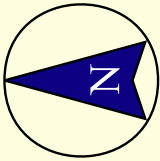
Legend

 State Highways

 Tompkins County

 City of Ithaca

 Village Boundaries



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## CHAPTER 2 – Freight Traffic Volumes / Problem Identification

### 2.1 Introduction

Chapter 2 presents the data collected. After obtaining and reviewing existing data concerning freight movements in the county, vehicle classification counts were collected; records showing special hauling permits, hazardous material generators and bridge weight and clearance restrictions were obtained; a truck origin/destination survey was conducted; and major shippers, carriers, highway superintendents and residents were interviewed and surveyed. All of this data was reviewed to determine the areas of concern with truck traffic.

### 2.2 Vehicle Classification Counts

Vehicle classification counts were conducted at twenty-two locations throughout the county. Classification counts are collected using machines and road tubes, which can differentiate between various types of vehicles, and record the numbers of vehicles by hour. Vehicles are divided into 13 separate classifications. Trucks for the purpose of this study are defined as Federal Highway Administration (FHWA) Vehicle Classification 5 (two axle, 6 tire single unit) and above. These counts were collected on all major travel routes entering and exiting the county, as well as the major routes entering and exiting the City of Ithaca. N.Y.S. Routes 13, 79, 38, 34, 34B, 89, 96, and 96B are examples of major routes where counts were taken. The New York State Department of Transportation (NYSDOT) and Tompkins County also provided classification count data that had been collected previously.

The average number of trucks per day by direction is shown in *Figures 2a and 2b* for the locations where data has been obtained. Additional five locations were counted after receiving input during Public Meeting #2. These counts were taken on Route 34 (East Shore Drive), Route 366 (Ithaca Road), Triphammer Road, Ellis Hollow Road, and Pine Tree Road. These locations were added to *Figures 2a and 2b*. The count data is included in *Appendix G*.

The following table presents the routes where more than 100 trucks per day were counted:

**Table 1a – Classification Counts**

<b>Route/Road</b>	<b>2-Way Truck Volume</b>
Route 89, NW of Ithaca	204
Route 96, NE of Trumansburg	396
Route 227, SW of Trumansburg	717
Route 79, W of Route 327	485
Route 79 bridge over Cayuga Inlet	1,690
Route 13, SW of Ithaca	578
Routes 96/34, S of Ithaca	309
Route 96B, S of Ithaca	242
Route 96B, S but within the City of Ithaca	1,149

Route 79, E of Ithaca	254
Route 79, E but within the City of Ithaca	1,524
Ellis Hollow Road	184
Route 366, just E of Route 79	496
Pine Tree Road, N of Mitchell Street	325
Route 13/Route 366 Overlap, NE of Ithaca	1,145
Route 366, W of 13/366 Overlap	149
Route 38, S of Dryden	285
Route 392, E of Dryden	207
Route 38/13 Overlap, N but within Dryden	1,129
Route 13, NE of Dryden	1,211
Fall Creek Road, NE of Freeville	591
Route 38, N of Freeville	276
Route 222, E of Groton	742
Route 38, N of Groton	250
Route 34B, E of Route 34	251
Routes 34/34B Overlap	477
Route 34B, NW of Route 34	165
Routes 13/34, N but within the City of Ithaca	2,147

## 2.3 Special Hauling Permits

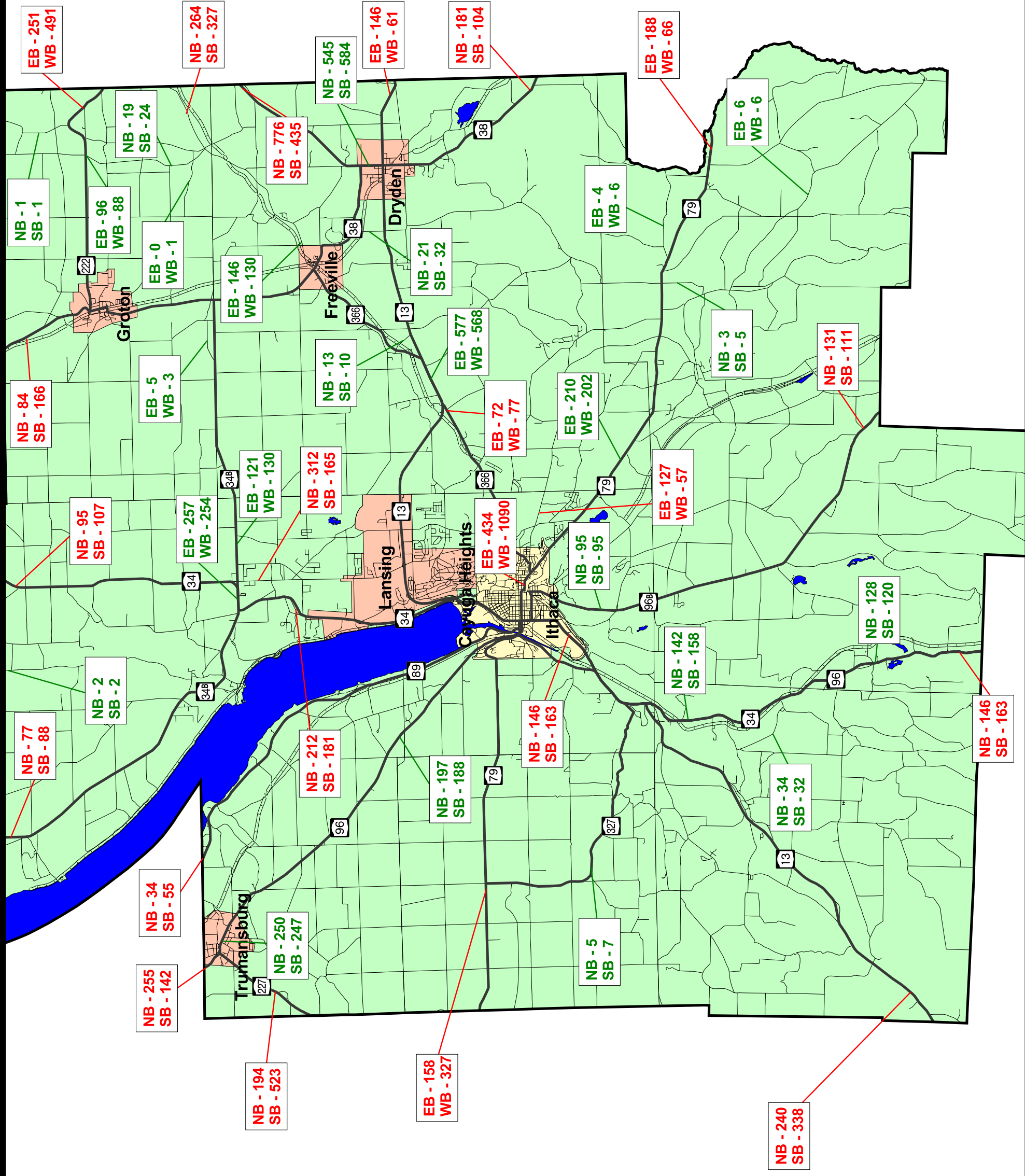
The NYSDOT special hauling permit applications from the past year were reviewed to determine what routes are being used in Tompkins County by overweight and oversized trucks. These special hauling routes can be seen in *Figures 3a and 3b*. These routes include:

- Route 96
- Route 13
- Route 96B
- Route 79
- Route 366
- North Triphammer Road, leading south from Route 34B/Route 34
- Seneca Street, Green Street and Clinton Street
- Route 34B
- Route 34 (south of Route 34B)
- Route 38
- Route 222
- Route 392

Special hauling permits are required to move vehicles on New York State highways if the vehicles exceed the legal dimensions or weights specified in Section 385 of the New York State Vehicle and Traffic Law. The permits specify days and times when the vehicles can travel, and are good only for travel on New York State highways. Travel on county or local roads can only be made with permission from the appropriate governing authority. There are several different permit forms, which must be submitted to the appropriate NYSDOT Region. The permit is issued for travel on specific routes, and may be issued for a one-time haul, intermittent use, or continuous use. As long as specified guidelines are met, and there is no history of violations, applications will be approved. Unless there are posted height, weight or other restrictions, travel is permitted on any State highway.



**Figure 2a.**  
**24 Hour**  
**Truck Volumes**



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Figure 2b.  
24 Hour  
Truck Volumes

Legend

Classification Counts Provided By:

NB\*12  
SB\*13

Sear-Brown

NB\*12  
SB\*13

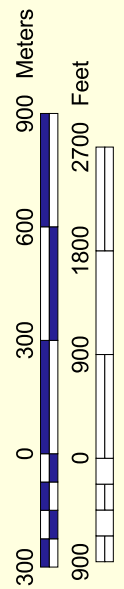
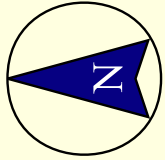
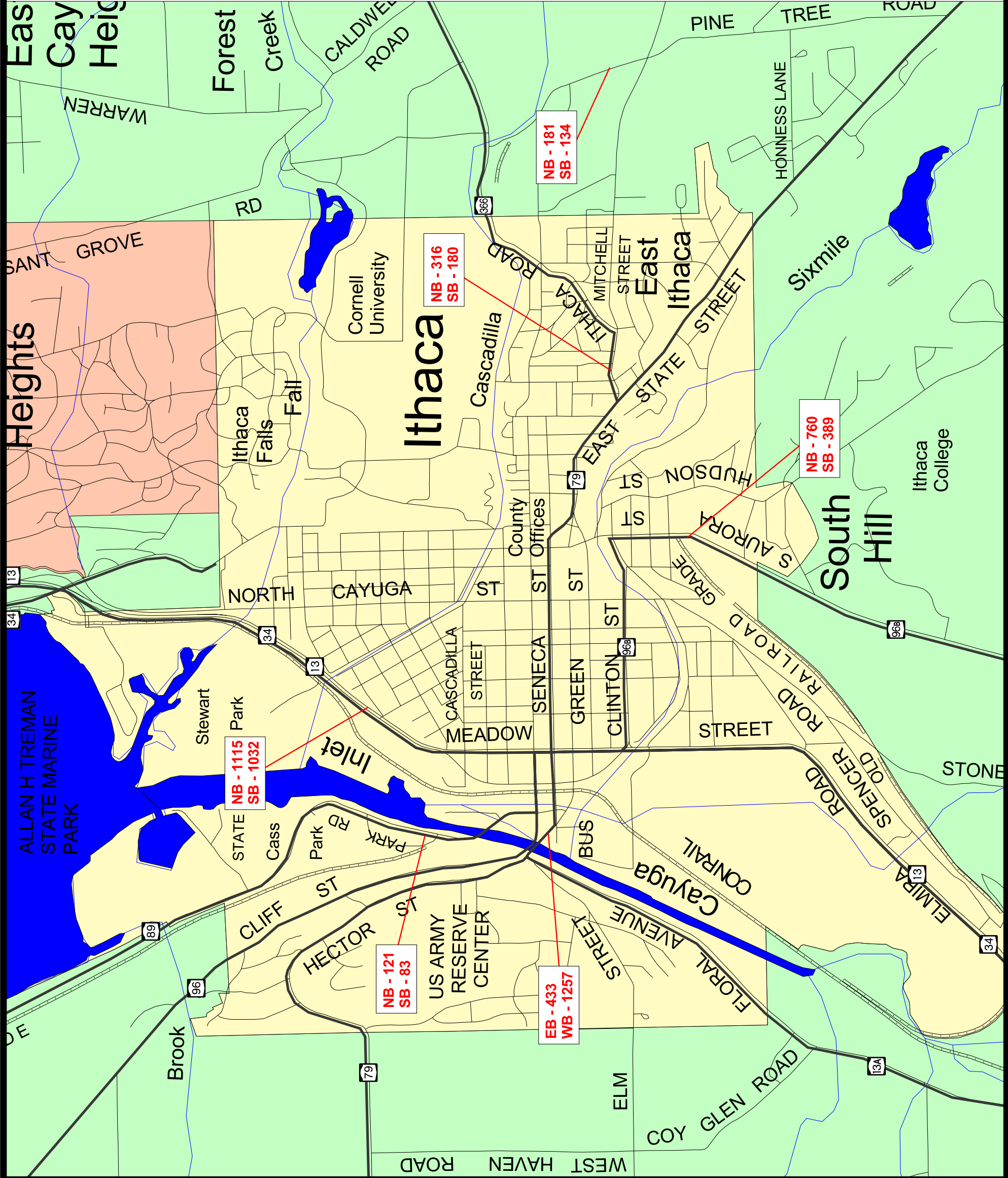
NYSDOT

Tompkins County

City of Ithaca

Village Boundaries

\* (NB/ SB Indicate Count Direction-  
Northbound ,Southbound, Eastbound,  
Westbound)



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Figure 3a. NYSDOT  
Special Hauling  
Permit Routes

Legend

15

Posted Weight Restrictions  
(Tons)

15'00"

Low Bridge Clearance

Overweight Permits

Tompkins County

City of Ithaca

Village Boundaries

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Figure 3b. NYSDOT  
Special Hauling  
Permit Routes

Legend

15

Posted Weight Restrictions  
(Tons)

15'00"

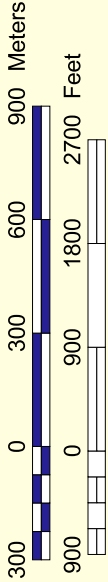
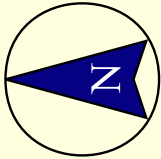
Low Bridge Clearance

Overweight Permits

Tompkins County

City of Ithaca

Village Boundaries



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## 2.4 Bridges

Data on bridges with posted weight limits and bridges with low vertical clearances was obtained from the NYSDOT for Tompkins County. There are twenty-nine bridges with posted weight limits and eight low clearance bridges in the county. The locations of these bridges are shown in *Figures 3a and 3b*.

## 2.5 Truck Origin and Destination Survey

A truck origin and destination survey was conducted on Friday, February 9, 2001 from 2:00 PM until 4:00 PM. This survey was conducted at 24 locations. The purpose of the origin and destination survey was to determine the percentage of truck traffic stopping in Tompkins County to conduct business, the percentage going straight through the county and what routes the trucks take. The survey consisted of stationing one person at each of the 24 locations from 2:00 PM until 4:00 PM. Each person noted the time, description, and license plate number for every truck that passed that location during the 2-hour time period. The data from each location was then compared to data from the other locations to find matches.

Concerns were expressed at the public meetings with the limited survey time period. It was conveyed that a higher percentage of through trucks might exist during the overnight hours, when enforcement is less intense. It was felt that, given the resources available, the fact that this is a “first step” planning study, and the difficulty in collecting data of this type during the night time hours, this was a reasonable representation of daytime truck traffic in and through the area. However, since truck classification data was collected by hour for a 24-hour period, we were able to examine truck volumes on some key roadways during the night time hours.

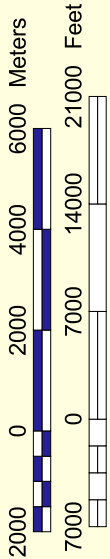
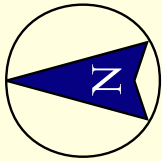
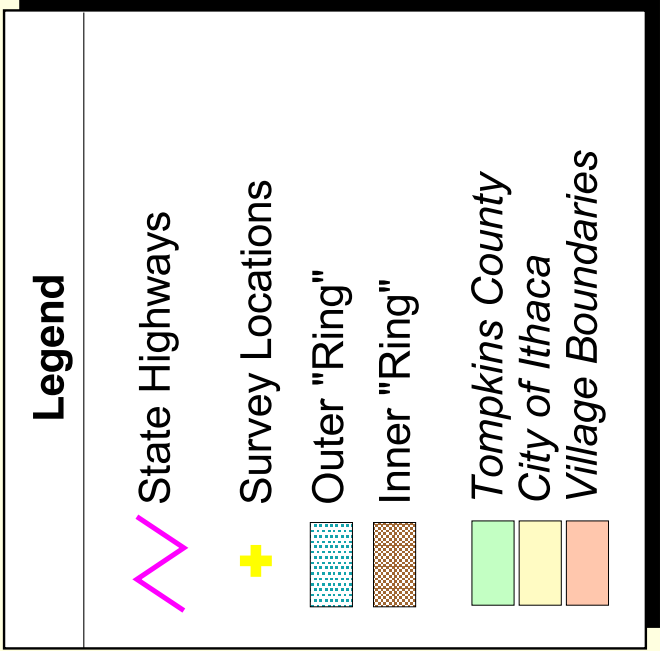
Table 1b shows the 24-hour distribution of truck traffic at five representative locations in the County. The actual data from these, and the other classification counts, are located in the report Appendix H. The number of trucks traveling on these roadways during the 10 pm – 6 am overnight period varies from 3% to 10%. One-third to over one half of these trucks travel during the 5-6 am hour. While there are trucks traveling on the roads during the overnight period, the number is greatly reduced from the rest of the day.

Table 1b also shows the number of single and double tractor-trailers that were recorded at the five locations. Single trailers are the normal tractor-trailers that one sees with a cab unit and one trailer unit. A double trailer has two trailer units being hauled in tandem by one truck cab. The percent of trucks that are tractor-trailers varies from around 13% on the more residential roads, to 46% on the State highways. The data showed no indication that the percent of tractor trailers increases during the overnight hours.

Surveys were taken on all of the major routes crossing two “rings” (Figure 4a). The outer ring included 16 locations at the Tompkins County border. The inner ring including 8 locations where the major routes entered the City of Ithaca Central Business District. Trucks entering and exiting the county at these locations were recorded. This procedure enabled us to document not only the trucks that traveled right through the county without stopping (including what routes they took),



**Figure 4a.**  
**Origin/ Destination**  
**Survey Locations**

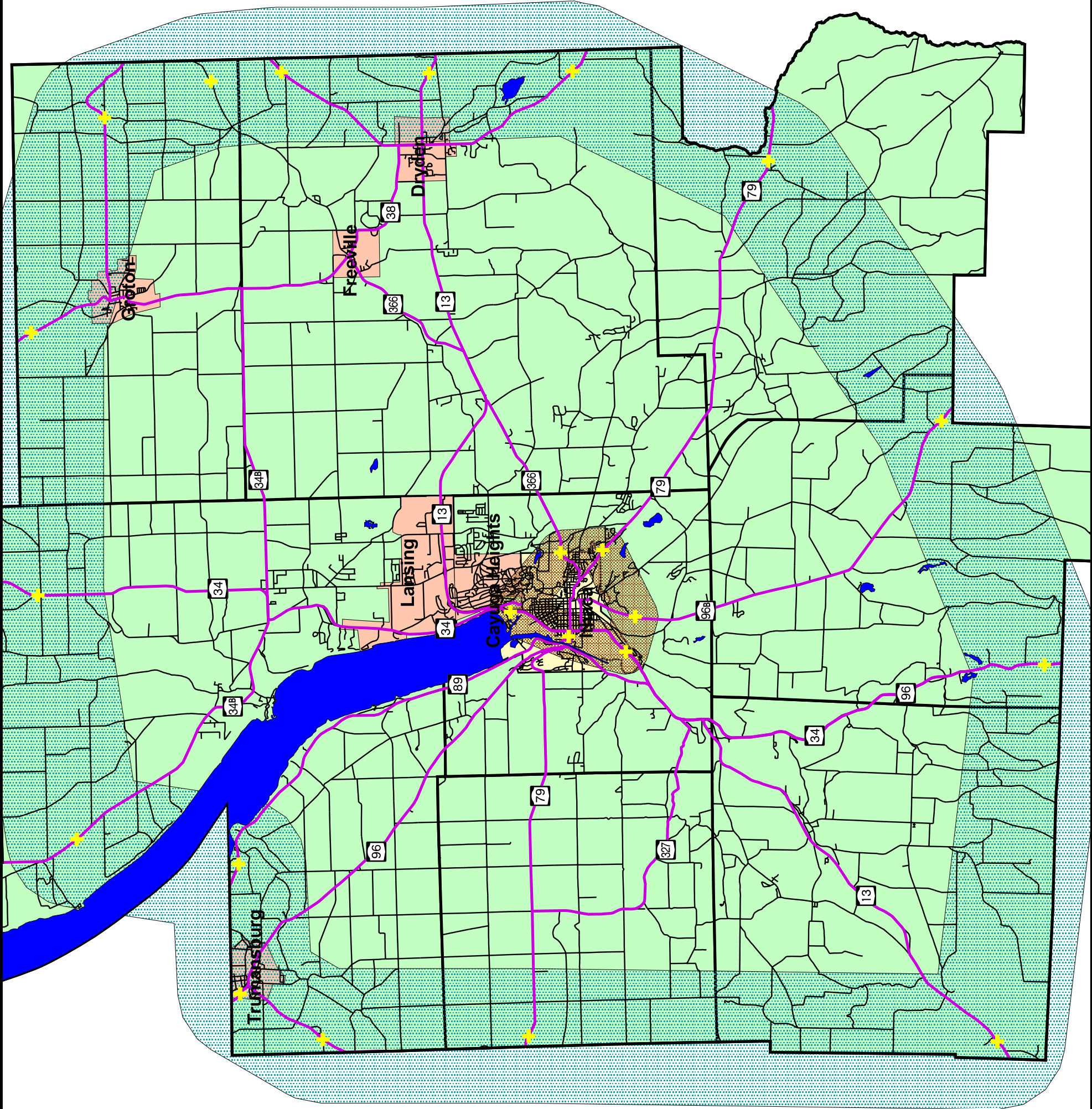


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but also how many trucks that enter or exit the county are stopping either inside or outside the Central Business District (CBD).

The origin/destination summary table is presented in Tables 2A and 2B. Following the row across from each entering or exiting location, one can determine where trucks that were surveyed came from or went to. Table 2A tracks all trucks that entered the county at the outer ring locations. Column 1 indicates the survey locations, and column 2 is the total number of trucks entering at the survey locations. Column 3 indicates the number of trucks that entered at the outer ring, but never appeared at any of the inner ring survey locations during the study period. This indicates that these trucks stopped somewhere before reaching the CBD. Column 4 indicates the inner ring survey locations, while column 5 show the number of trucks that entered at the outer ring and did cross an inner ring survey location. The next set of columns (labeled “inner existing”) indicates those trucks that then continued on and exited at one of the inner ring survey locations, as well as what route they took. Finally, the last set of columns (labeled “outer existing”) indicates those trucks, which then exited the county at one of outer ring stations, indicating that they traveled right through Tompkins County without stopping.

Table 2B is similar, but it tracks those trucks, which exited the county at the outer ring locations. Table 2A does not account for trucks that began their trip somewhere within the study area. Table 2B backtracks from the “outer ring” exiting to capture these trucks that began their trips within the county. Column 3 indicates those trucks which exited the county at the outer ring locations, but did not exit through one of the inner ring locations, indicating that their trip originated somewhere in between. Column 5 indicates the number of trucks that did exit through one of the inner ring locations, listed in column 3. Finally, the last set of columns shows the trucks that also entered at an inner ring location, before exiting through an inner ring and an outer ring station. There is no set of “Outer Entering” columns, as that would be a duplication information already contained in Table 2A.

434 trucks were surveyed during this time period. 6% of these were through trucks, meaning that they were not stopping in Tompkins County. 94% of the truck traffic was conducting business in the county. In fact, 72% of trucks entering the county stop before they even get to downtown Ithaca. This points to a high level of truck activity outside of the Ithaca core urban area. Route 13 had the highest truck volume during the survey period (142, combined northbound and southbound), and also one of the highest percent of trucks that passed through without stopping (15%). 39% of the Route 13 truck traffic that entered at the County border, traveled into the City of Ithaca. Route 96 from the north had the second highest two-way truck volume (58), but a much lower 14% of the trucks that entered the City of Ithaca, and only 7% that went straight through the County. Out of 28 trucks, Route 34 from the north had a higher 21% enter the City, but only 7% traveling straight through. Finally, Route 96B had a very high 88% of the 8 trucks enter the City, but none traveled straight through the County.

**Figure 1b**  
**24-Hour Truck Volumes on Key Roads**

Time	Route 79 E. of Pine Tree			Routes 13/366 Overlap			Route 96 N. of City			Pine Tree Rd. N. of Mitchell			North Triphammer		
	Total	Single Trailers	Double Trailers	Total	Single Trailers	Double Trailers	Total	Single Trailers	Double Trailers	Total	Single Trailers	Double Trailers	Total	Single Trailers	Double Trailers
Mid - 1 am	3	3		10	7		6	4		0	0		3	0	
1-2 am	3	1		6	5		6	4		1	0		2	0	
2-3 am	4	3		11	7		5	3		1	1		3	0	
3-4 am	3	2		12	9		1	1		1	0		0	0	
4-5 am	5	3		15	10		2	2		6	0		1	0	
5-6 am	9	4		33	16		11	8		23	5		3	1	
6-7 am	17	5		50	27		14	6		32	2	1	8	1	
7-8 am	32	5		82	35		20	4		46	8		30	3	1
8-9 am	33	8		80	29		35	16		28	3		27	1	
9-10 am	31	6		78	37		35	19		10	1	1	32	6	1
10-11 am	34	9		104	39		36	14		32	4	2	23	2	
11 am - noon	32	8		93	43		30	14		22	5		40	0	
noon - 1 pm	33	10		85	42		23	10		21	2		39	9	1
1-2 pm	38	10		91	36		36	17		19	1		44	5	1
2-3 pm	30	5		76	32	1	28	11		20	0	1	41	6	
3-4 pm	32	6		79	32		24	10		16	3	1	39	7	
4-5 pm	23	6		68	23		21	11		13	2		36	7	
5-6 pm	16	4		45	20		16	7		3	1		22	2	1
6-7 pm	11	3		32	20		10	3		9	1	1	16	0	
7-8 pm	6	4		30	17		8	3		2	0		8	0	1
8-9 pm	6	2		18	14		5	2		3	0		11	1	1
9-10 pm	5	2		22	16		7	5		0	0		15	2	
10-11 pm	3	1		15	9		3	1		1	0		7	0	
11 pm - Mid	3	3		10	6		3	2		1	0		6	0	
Total Daily	412	113	0	1145	531	1	385	177	0	310	39	7	456	53	7
Between 10 pm - 6 am	8%	19%		9%	12%		10%	15%		11%	15%		5%	2%	



Table 2A

**Truck License Plate Survey Summary Matrix -  
Trucks Entering Tompkins County**

Outer Entering Location	Total Trucks Entering	Gone	Inner Route Loc.	Inner Entering	Inner Exiting							Outer Exiting																
					89	96	79 WB	13 SB	96B	79 EB	366	13 NB	89	96 S	227	79 E	13 N	96 N	96B	79 W	38 N	392	13 S	Fall Ck	222	38 S	34 S	34B S
89 SB	5	1	89	4				1																				
96 SB	22	18	96	4						1																		
227 NB	1	1	96	0																								
79 EB	4	3	79	1																								
13 NB	23	12	13	11									4															
96/34 NB	9	8	13	1																								
96B NB	3	2	96B	1																								
79 WB	9	5	79	4	1				1																			
38 NB	8	7	13/366	1					1																			
392 WB	0	0	13/366	0					0																			
13 SB	38	21	13/366	17				4	7														3					
Fall Creek	13	13	13/366	0																								
222 WB	13	13	13/366	0																								
38 SB	12	12	13/366	0																								
34 SB	16	10	13	6						1																		
34B SB	5	4	13	1																								

Table 2B

**Truck License Plate Survey Summary Matrix -  
Trucks Exiting Tompkins County**

Outer Exiting Location	Total Trucks Exiting	Gone	Inner Route Loc.	Inner Exiting	Inner Entering									
					89	96	79 WB	13 SB	96B	79 EB	366	13 NB		
89 NB	3	2	89	1			1							
96 NB	36	32	96	4			1	1						
227 SB	3	2	96	1						1				
79 WB	3	3	79	0										
13 SB	50	36	13	14			1	8						
96/34 SB	8	5	13	3										
96B SB	12	6	96B	6		2		2						
79 EB	16	9	79	7	1	1								
38 SB	19	18	13/366	1										
392 WB	2	2	13/366	0										
13 NB	39	24	13/366	15		1			2			4		
Fall Creek	18	14	13/366	4					1					
222 EB	12	12	13/366	0										
38 NB	12	11	13/366	1										1
34 NB	12	12	13	0										
34B NB	7	7	13	0										

## 2.6 Major Shipper/Receiver and Carrier Interviews

Telephone interviews were conducted with representatives from a sample of shipping/receiving and carrier firms in Tompkins County. Shipping/Receiver firms were considered to be the end users or producers of products moving through the county. Carriers were the for-hire trucking firms that moved goods within the county.

Over thirty shippers/receivers and carriers were interviewed. Interviews were conducted with companies such as P&C Foods, TOPS, Cornell University, Ithaca College, Borg Warner, etc. A total of thirty-six companies were contacted throughout the area and thirty-one responses were received, this gave us a response rate of 86%. Responses were not received from Axiohm Corp., Wegmans, G & L Trucking, Maines Paper & Food Service, and Zolar Moving Company. The locations of the shipper/receiver and carrier facilities are displayed in *Figure 4*.

The information obtained from the interviews included cargo types, volumes shipped, routes, frequency of operations, fleet size, and any perceived problems in providing service within the county. A copy of the questions asked in the phone interviews can be found in *Appendix A*. The information received from the shippers/receivers and carriers through the phone interviews was put into summary tables, which can be found in *Appendix B*.

Most of the shippers/receivers said that they did not have any problems with truck transportation within Tompkins County. Those that did have problems, identified issues that include poor/narrow road conditions, bridge restrictions, congested and confusing traffic patterns through the city, problems with the City Police, winter road conditions, and confusion with “no trucks except local delivery” restrictions. Issues brought up by the carriers include problems with the state prohibition of 53-foot trailers, getting around the college area roads, truck restrictions in the City of Ithaca, the conditions of Mallard Road in Newfield, and the lack of other drivers’ consideration for stopped trucks.

The cargo information obtained from the telephone surveys was placed into five categories. These are:

- *Bulk Commodities* – grain, coal, salt, gravel, sand, cement, etc.
- *Groceries/Food Products* – grocery store items and restaurant supplies
- *Industrial/Manufacturing Equipment* – automobile parts, turbines blades, transmissions, etc.
- *Trash* – garbage, recycling material, construction debris, etc.
- *Other* – fuel, printing materials

Once all of the cargo information was placed into categories, it was then mapped out by the routes used by each of the categories. *Figures 5a and 5b* show the types of cargo and the routes used for each type.

### ***Railroad/Airport***

In addition to the trucking firms, the Tompkins County Airport (US Airways) and the Norfolk Southern Railroad were interviewed. US Airways ships a variety of items, but the most

scheduled item is shipping seafood from LaGuardia Airport in New York City to Ithaca twice a week, on Mondays and Thursdays. The airport also receives deliveries by truck. Fuel is delivered to the airport three times a week and Glycol (deicer) is delivered once a week.

The Norfolk Southern Railroad has one train a day running through Tompkins County, Sunday through Thursday. In addition they have one to three trains a week delivering coal to AES/Milliken Station. Norfolk Southern identified their primary business in Tompkins County as delivering coal to AES/Milliken Station and Cornell University, as well as shipping salt out of Cargill Inc.

## **2.7 Hazardous Material Hauling**

This category can be split into two types – hazardous wastes and hazardous materials. While hazardous wastes are also considered hazardous materials, they are far more closely regulated. A search on the U.S. Environmental Protection Agency (EPA) database indicated there are no hazardous waste treatment, storage, or disposal facilities in Tompkins County. The database did reveal that there are eight Large Quantity Generators in the county. Large Quantity Generators of hazardous wastes are facilities that generate more than 1,000 kilograms of hazardous waste per month. Three of the eight are short-term generators, meaning that they are only generating hazardous waste because of reconstruction or renovation projects. The Ithaca City School District, Newfield Central School District, and the NYSDOT Bridge BIN # 1023380 (RT 34B over Salmon Creek) are the three short term generators. The long-standing generators of hazardous waste in Tompkins County are:

- CNG Transmission Corp.
- Chemical Disposal Site
- Cornell University
- Ithaca College
- Tompkins County Solid Waste Transfer Facility

The locations of the long-standing hazardous waste generation facilities are on *Figure 4b*.

Hazardous materials other than wastes are regulated in a less stringent manner. The state does not require registration of vehicles that transport hazardous materials, but does require that federal codes be followed for marking and placarding of trucks. New York State also does not have a set routing system for hazardous material hauling. The state highways are deemed to be built to handle all truck traffic, so traffic is not restricted from them. The state does have the authority to ban hazardous materials transport from state highways, but it rarely does.

According to Title 49 of the Code of Federal Regulations, section 397.67, “a motor vehicle carrying hazardous materials...shall operate the vehicles over routes which do not go through or near heavily populated areas.” Exceptions are made, however, when the motor carrier determines that “1) There is no practical alternative; 2) A reasonable deviation is necessary to reach points of loading or unloading...” It should also be noted that “operating convenience is not a basis for determining whether it is practicable to operate a motor vehicle in accordance [with the above].” In short, it is up to the discretion of the driver as to what route is safe to take.

Since truck drivers who haul hazardous materials are not required to register or follow set routes, it is extremely difficult to determine what routes trucks hauling hazardous materials take, short of actual observation. They are free to use all of the state highways, so it is likely that these trucks follow the same travel patterns as the rest of the trucks. Municipalities may regulate the routing of hazardous materials through ordinances.

## **2.8 Area Resident Survey**

An area resident survey was conducted in order to determine the public's perception of where trucks travel and what impacts/concerns residents may have with trucks in the area. The survey also added to the public involvement process for this study. The surveys were distributed a number of ways. On December 7, 2000, from 12:30 PM until 5:00 PM, in-person surveys were conducted at Center Ithaca and the Tompkins County Library. Surveys were placed in all of the town halls in Tompkins County, as well as the Groton Public Library, the Trumansburg-Ulysses Public Library, and the Tompkins County Library. The survey was also sent out by the ITCTC to different email distribution lists in the county. An article was published in the Ithaca Journal on January 15, 2001 explaining the purpose of the study, listing the locations where the surveys were available, and providing an email address where people could request a survey form. A copy of the survey questionnaire can be found in *Appendix A*.

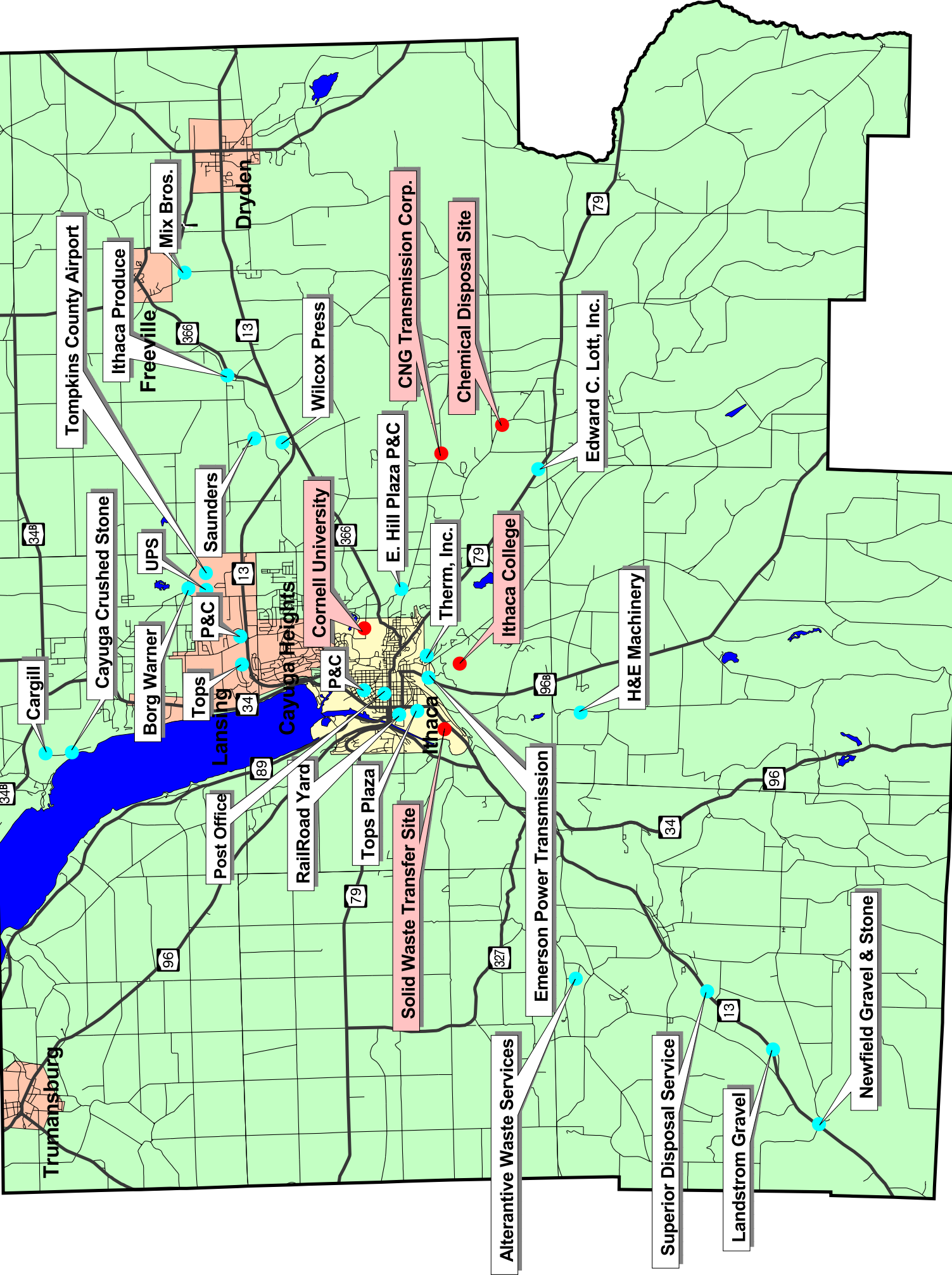
*Appendix C* contains summary tables of the 390 area resident surveys received. Responses were received from all over the county, although Ithaca, Dryden, Lansing and Newfield represented almost 65% of the responses. The concerns that people had with truck traffic focused on six main areas – noise, pollution, hours of operation, vibrations, too many trucks, and the speed of trucks. Over 100 specific or general road segments and intersections were mentioned as concern areas. Locations that had higher numbers of concerns include Route 366, Route 13, State Street, Route 34B, Route 34, Route 96, East Shore Road, Ellis Hollow Road and Mitchell Street.

The areas of concern and the routes used by the shipper/receiver and carriers in the county were overlaid on the routes indicated by the residents as having truck issues, and presented in *Figures 6a and 6b*. The figures illustrate that there are many areas where residents have concerns with trucks, but according to the shipper/receiver and carrier interviews, their trucks are not traveling in these areas. This may indicate that not all shipper/receivers and carrier were interviewed (there were several significant ones that would not participate in this study), or that the trucks are using routes which the shippers/receivers and carriers are not aware of.

## **2.9 Town Highway Superintendent Questionnaire**

The Town Highway Superintendents in Tompkins County meet on a monthly basis. The December, 2000 meeting was attended by Sear-Brown representatives both to explain the purpose of this study, as well as to obtain input regarding trucks in their Towns. A questionnaire was handed out to all of the Highway Superintendents to obtain input. A copy of the questionnaire can be found in *Appendix A*. Questionnaires were returned and consolidated into a summary table. The summary table can be found in *Appendix D*. Specific areas of concern were identified in each town were identified.

Figure 4b. Carriers  
& Shipper/ Receivers



Legend

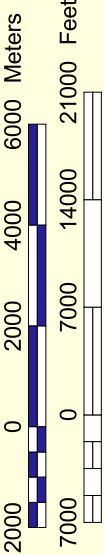
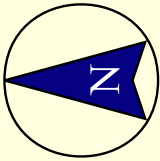
Facility Locations

Haz-Mat locations

Tompkins County

City of Ithaca

Village Boundaries



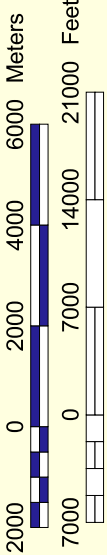
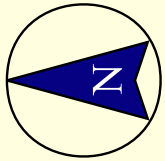
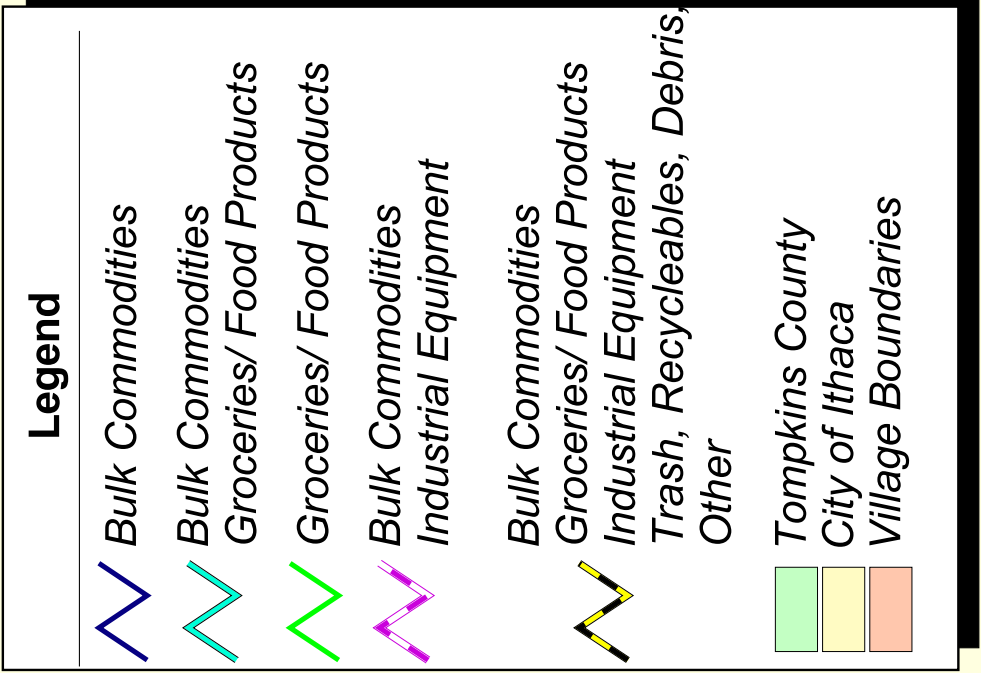
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Figure 5a. Goods &  
Hauling Routes



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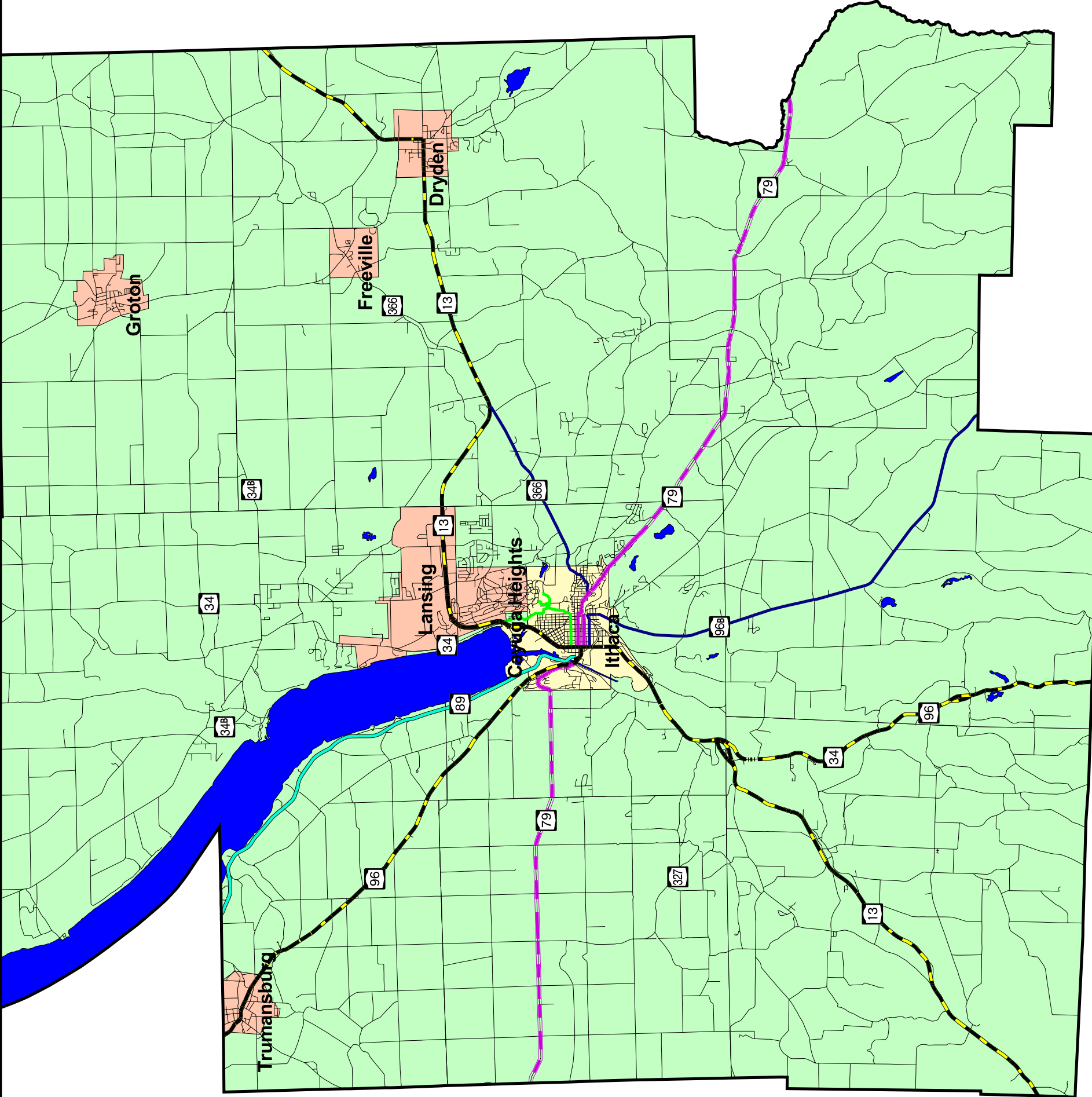
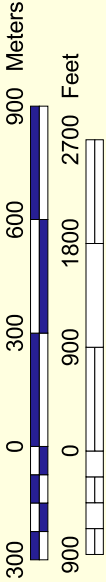
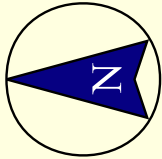
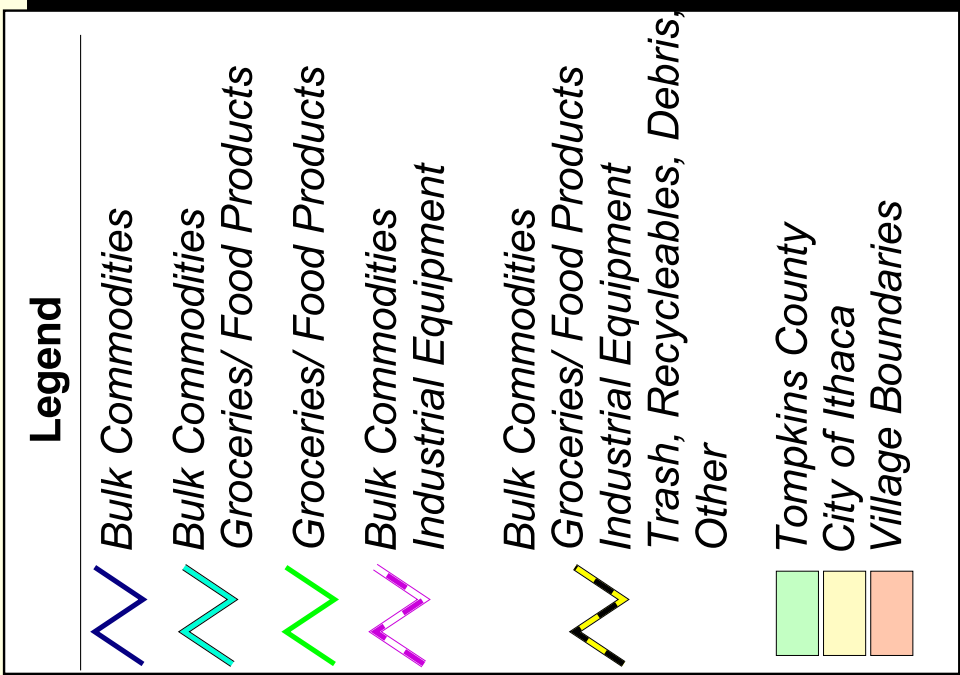




Figure 5b. Goods & Hauling Routes



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## 2.10 Areas of Concern

After examining all of the data and input received, specific and general areas of concerns with truck traffic were identified. Only the areas where problems with truck traffic that can be solved or partially mitigated are listed here. There were many roads that were listed as having truck concerns, some of which are designed to handle trucks. Most residents would prefer to have no trucks at all, while the shippers/receivers and carriers would prefer as straight of a line as possible to their destinations. Neither of these is feasible, so the most manageable problems with truck traffic are identified here.

While the state highways are classified and designed to handle truck traffic (in general), trucks generally use non-state highways (*Figures 2a and 2b*). Based on the vehicular classification data obtained throughout the county, the non-state highways being used heavily by trucks are:

- Pine Tree Road (315 trucks over 24 hour period)
- Ellis Hollow Road/Mitchell Street (184 trucks over 24 hour period)
- N. Triphammer Road (477 trucks over 24 hour period)
- Fall Creek Road (591 trucks over 24 hour period)

Some N.Y.S. highways in Tompkins County have characteristics that are not suited well for truck travel (i.e., they pass through recreation areas or have steep grades). These routes are:

- Route 89 (89 trucks over 24 hour period)
- Route 34 (East Shore Drive - 393 trucks over 24 hour period)
- Route 96B/Clinton Street
- Route 366 /Ithaca Road (496 trucks over 24 hour period)
- Route 327 (12 trucks over 24 hour period)
- Route 13A

The shipper/receivers and carriers had the following concerns (*Appendix B*):

- Getting around the colleges / narrow roads
- Poor pavement condition on Portland Point Road and Mallard Road in Newfield
- Getting truckers to use Route 13 to Route 366 to get to Cornell to avoid State Street
- Bridge postings/restrictions on several roads
- Congestion and confusing travel patterns within the City of Ithaca
- Confusion with the meaning of the “no trucks except local delivery” restrictions

The town highway superintendents had concerns with trucks on the following routes, which are either N.Y.S highways or roads heavily traveled by trucks (*Appendix D*):

- Intersection of Route 34 & Route 34B
- N. Triphammer Road
- Route 34B
- Intersection of Route 222 and Route 38
- Buffalo Street, S. Albany Street, and Hudson Street in the City of Ithaca



Areas where a significant number of residents indicated concerns with trucks are (*Appendix C*) listed here. Note that, because of survey methodology, there may be other locations where trucks may be a problem for residents, but are not identified here:

- Route 366
- Route 13
- State Street
- Route 96
- Route 34B
- Route 34/East Shore Drive
- Ellis Hollow Road/Mitchell Street
- Warren Road
- Turkey Hill Road
- Aurora Street
- Route 38
- Route 79

## **2.11 First Public Meeting**

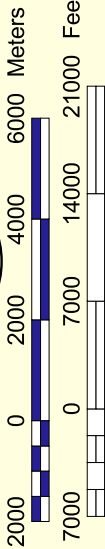
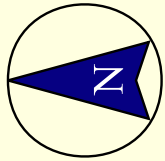
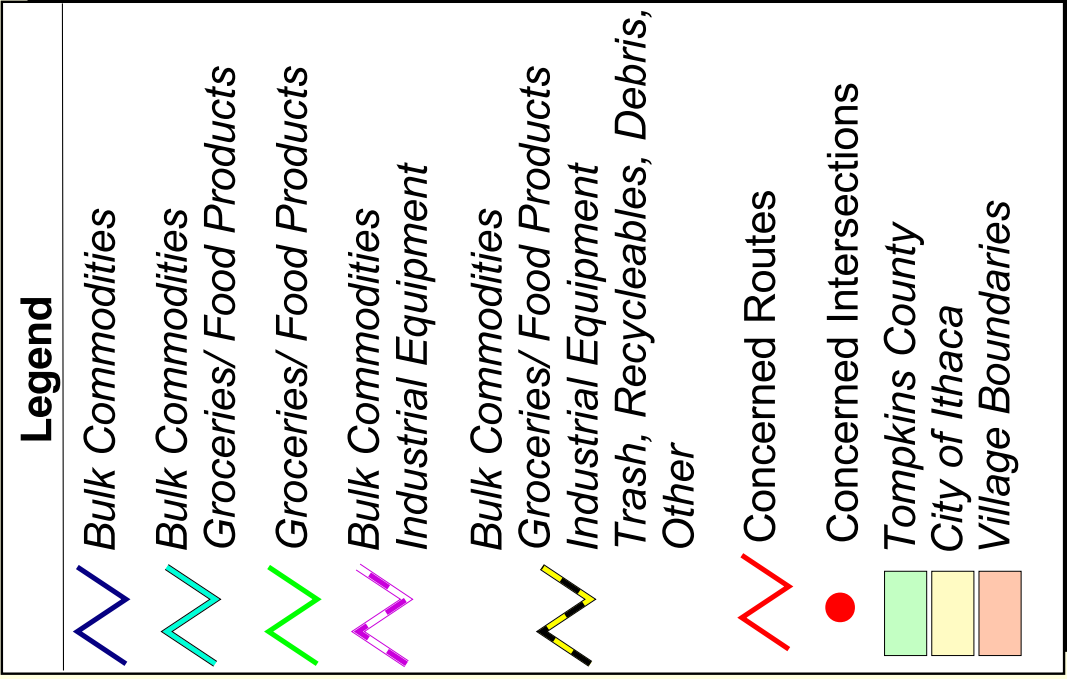
The first public meeting was held on Tuesday, January 30<sup>th</sup> from 6:30 PM – 8:30 PM at the Tompkins County Library. The purpose of this meeting was to discuss in an open forum existing county freight movement patterns, provide an overview of the type and volume of commodities shipped and received from the county, and discuss the major industrial and institutional sites that have an impact on county freight traffic. During this meeting the public had the opportunity to voice any concerns they had with existing freight travel patterns and other perceived problem areas.

The concerns voiced by the public included:

- Trucks are too large;
- Trucks are doing a lot of damage to the roads;
- Need to get trucks off from residential roads;
- Emissions from trucks is terrible;
- Need for better land-use planning;
- Concerns with pass through truck traffic
- Need for better enforcement
- Sounds levels, especially from “jake brakes”;
- Need to obtain extra traffic counts; and
- Truck traffic on roads with low clearance bridges such as Rt. 366 and Judd Falls Road

Twenty people attended the first public meeting. The input received can be found in *Appendix F*.

**Figure 6a. Residents  
Views Compared to  
Shipper Routes**

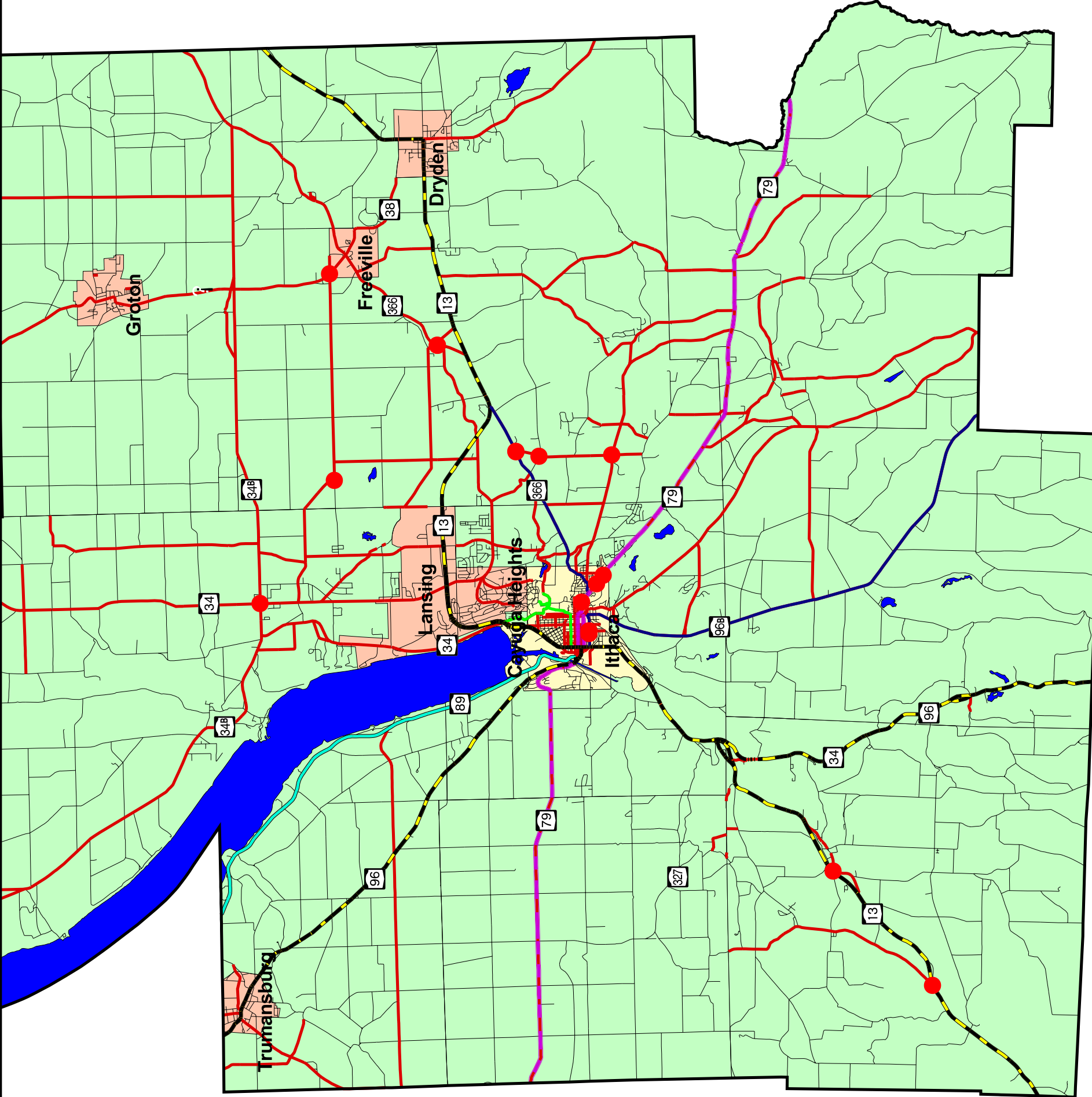


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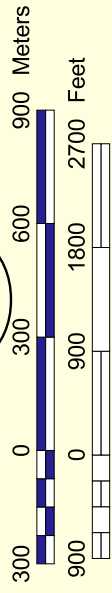
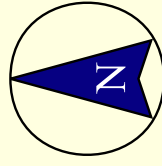
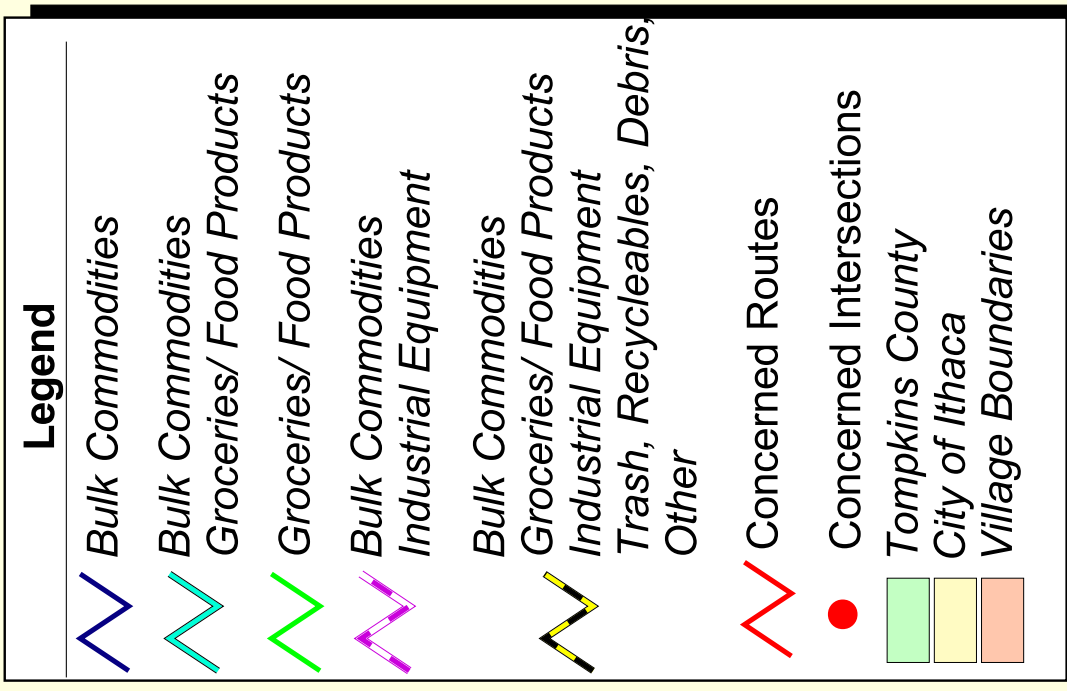
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**Figure 6b. Residents  
Views Compared to  
Shipper Routes**



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## CHAPTER 3 – Alternative Strategies

### 3.1 Introduction

Chapter 3 of this document and associated graphics identifies and assesses potential alternate routes, plus strategies, which address the truck issues identified in Chapter 2. The impacts of railroad movements through the County are also summarized. The potential impacts of the various alternative routes and strategies are explored in Chapter 4.

### 3.2 Existing Functional Road Classification

Functional Classification is the grouping of roads, streets, and highways based on the type of service they provide. The functional classification system for Tompkins County is shown in *Figures 7a and 7b*, and described below.

- *Principal Arterials* connect major activity centers and contain the greatest percentage of through or long-distance travel. Principal Arterials experience the higher traffic volumes.
- *Minor Arterials* connect and enhance the Principal Arterial system. Minor Arterials experience medium traffic volumes.
- *Collectors* provide direct access to residential, commercial, and industrial areas.
- *Local Roads* allow access to individual homes, businesses, and stores. Local roads should not be used as through traffic routes.

According to the shippers/receivers and carriers, their trucks are using N.Y.S. highways, which are major collectors and arterials. This is also supported by the traffic count data, which shows the higher volumes of trucks are on the N.Y.S. highways and the major collectors and arterials. Local businesses and shippers did not have problems or concerns with the current roadway system. Where possible, alternatives should direct the major truck traffic to the arterial roadways, and use the collectors and local roads only for local deliveries, or when an arterial alternative is not available. In that case, mitigation may be appropriate to minimize impacts.

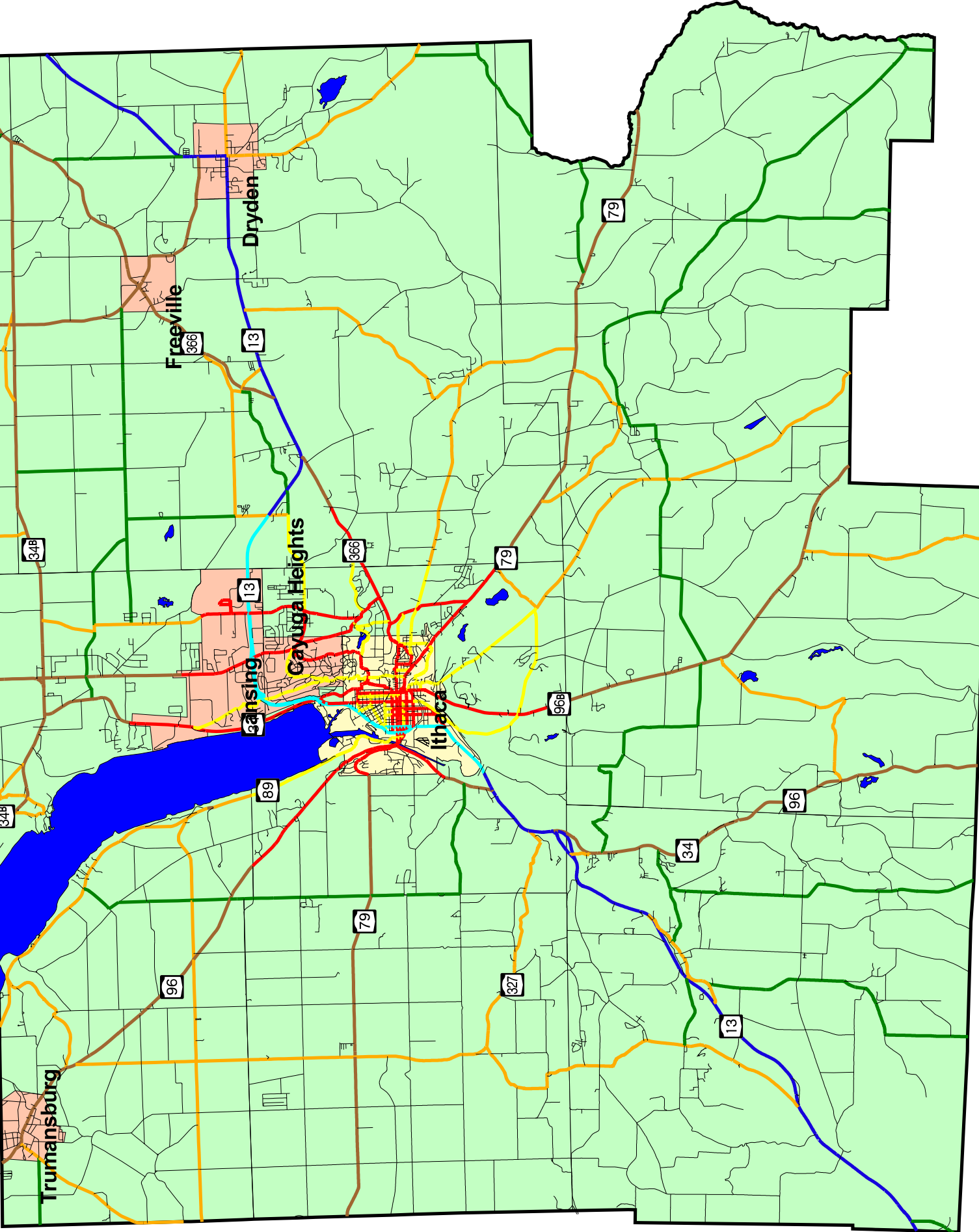
### 3.3 Alternative Truck Travel Routes and Strategies

This section outlines alternative truck travel routes and/or alternative strategies that could help to alleviate some of the concerns voices about truck traffic. Each issue is described, and the rationale and pros/cons of each alternative are also discussed, except for impacts on residential areas, which are discussed in Chapter 4. In some cases, only limited mitigation may be possible, as certain routes are designed for trucks, and some impacts must correspondingly occur.

Potential alternatives were identified based on the information gathered through public meetings, meetings with the Highway Superintendents, interviews, and surveys. The alternatives are listed below, by issue or problem, as identified in Chapter 2. The alternatives are not presented in any order of preference. Note that these are alternatives for analysis purposes, and do not represent recommendations (shown in Chapter 5).



Figure 7a.  
Functional Class



Legend

Urban Principal Arterial

Urban Minor Arterial

Urban Collector

Rural Principal Arterial

Rural Minor Arterial

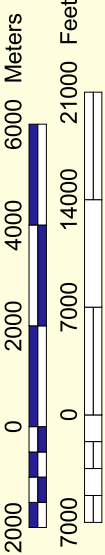
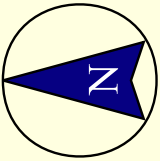
Rural Major Collector

Rural Minor Collector

Tompkins County

City of Ithaca

Village Boundaries



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Figure 7b.  
Functional Class

Legend

Urban Principal Arterial

Urban Minor Arterial

Urban Collector

Rural Principal Arterial

Rural Minor Arterial

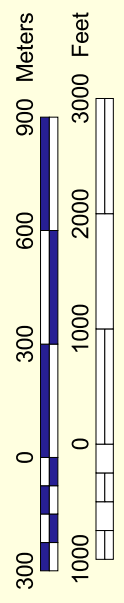
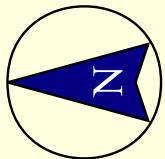
Rural Major Collector

Rural Minor Collector

Tompkins County

City of Ithaca

Village Boundaries



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The alternatives include a potential series of truck routes. These alternatives provide logical inclusion and consistency with the existing truck routing system. Trucks cannot be prohibited from N.Y.S. highways, but alternative routes that may have fewer impacts could be signed and promoted for truck use. The potential truck route alternatives are identified in *Figures 8a and 8b*.

#### **Non-state highways being used heavily by trucks:**

- *Pine Tree Road* (315 trucks over 24 hour period)

The area on the east-side of Ithaca between Route 366 and Route 79 is a hot spot. Trucks coming from the east on Route 79 and heading to Cornell University, NYSEG and other destinations in the Cayuga Heights area have no viable north/south route. Traveling further to the west brings trucks to the steep hills and narrow streets of the City of Ithaca. Continuing west required trucks to travel through downtown, resulting in unacceptable increases in travel time.

Alternative #1: Make Pine Tree Road a truck route. Pine Tree Road is a direct and convenient connecting road between Route 366 and Route 79, plus it passes through the East Hill retail area. Trucks currently recognize this convenience, as evidenced by the truck volume on the road, making this a likely candidate for inclusion as a truck route. Signing would be needed along Route 79 and Route 366 to promote Pine Tree Road as a truck route. Pine Tree Road will need to be improved to be able to handle the heavier truck traffic. Improvements would include, but not be limited to, widening shoulders and travel lanes and improving intersection turning radii. There is also an old railroad bridge that crosses over Pine Tree Road that is currently being used as a multi-modal trail, just south of Route 366, that has a clearance of 14'00". The clearance of this bridge should be included in the signing and consideration should be given for increasing the clearance upon replacement. A pedestrian bridge may be more suitable for this location.

Alternative #2: Seek ways to try to reduce truck travel, such as coordinating with trucking firms to use preferred routes, posting signs that encourage preferred routes and enticing firms to relocate distribution centers to locations that are more convenient to proper truck routes.

Alternative #3: Post "No Through Trucks – Local Deliveries Only" on Pine Tree Road.

Alternative #4: Conduct more detailed studies to find a long-term solution to trucks in this area, which could involve consideration of new roadway connections.

- *Ellis Hollow Road/Mitchell Street* (184 trucks over 24 hour period)

Ellis Hollow Road is used by some local trucks, but also as an alternate route to Route 79. This road is residential and not designed to handle heavy truck traffic.


Alternative #1: Designate these roads as a "no through trucks – local delivery only" route. Trucks would be forced to stay on Route 79 and Route 366.


Alternative #2: Do nothing. This would let trucks travel as they are currently are.





**Figure 8a.**  
**Potential Truck**  
**Route Alternatives**


Legend


 Truck Routes  
on N.Y.S. Routes

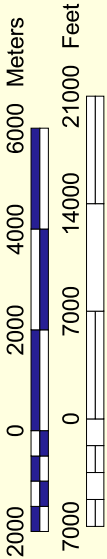
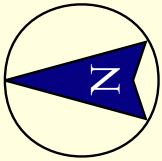
 Truck Routes  
on Non-State Routes

 No Thru Trucks/  
Local Deliveries Only

 Tompkins County

 City of Ithaca

 Village Boundaries

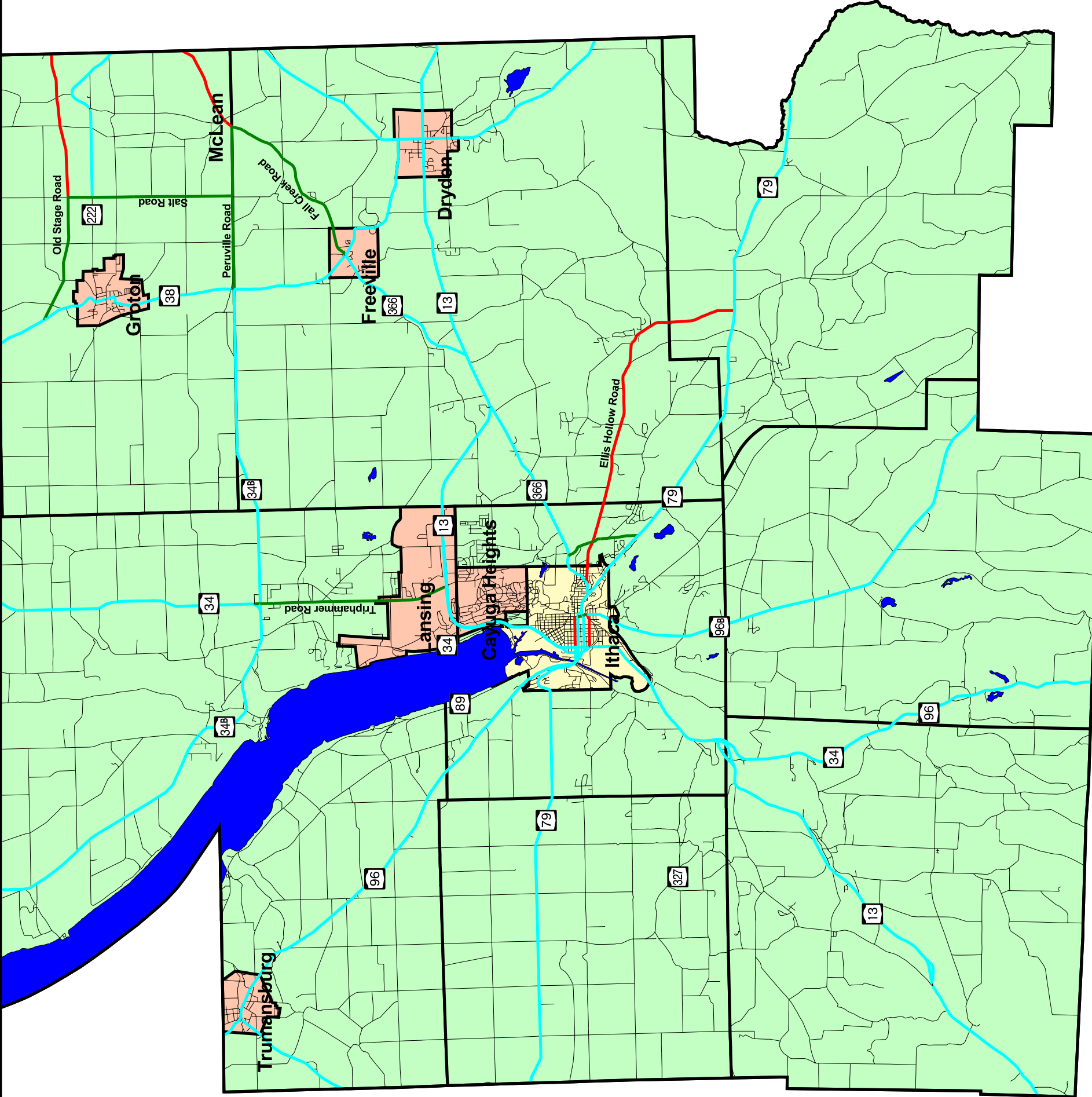


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**Figure 8b.**  
**Potential Truck**  
**Route Alternatives**

Legend

Primary Truck Routes  
on N.Y.S. Routes

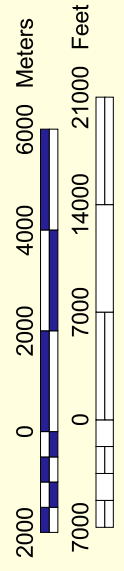
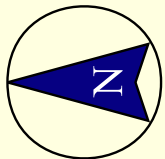
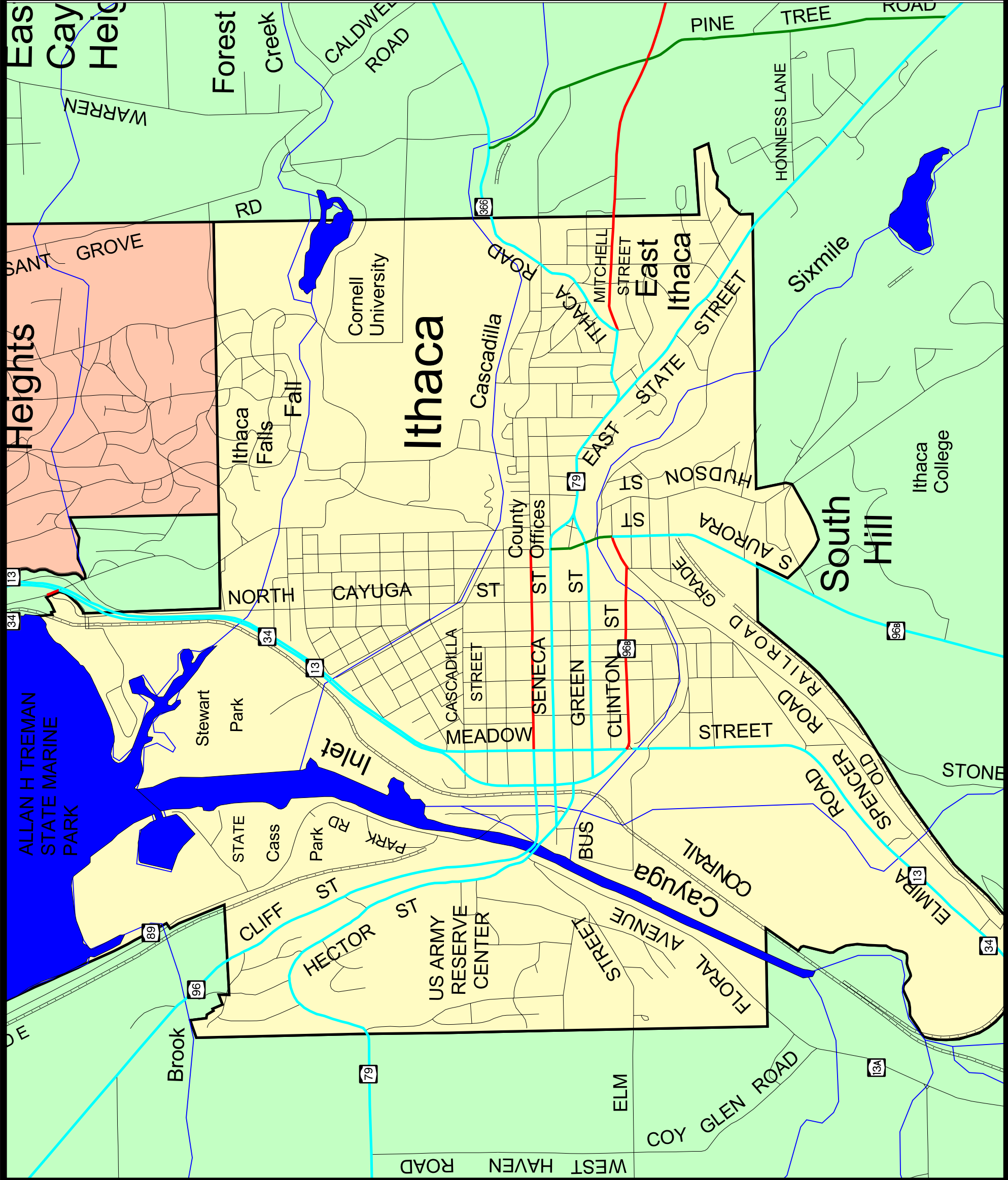
Primary Truck Routes  
on Non-State Routes

No Thru Trucks/  
Local Deliveries Only

Tompkins County

City of Ithaca

Village Boundaries



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Alternative #3: Make Ellis Hollow Road/Mitchell Street a truck route. Signing would be needed along Route 79 and Route 366 to promote Ellis Hollow Road as a truck route. Ellis Hollow Road and Mitchell Street will need to be improved to be able to handle the heavier truck traffic. Improvements would include, but not be limited to, widening shoulders and travel lanes and improving intersection turning radii.

Alternative #4: Seek ways to try to reduce truck travel, such as coordinating with trucking firms to use preferred routes, posting signs that encourage preferred routes and enticing firms to relocate distribution centers to locations that are more convenient to proper truck routes.

- *N. Triphammer Road* (477 trucks over 24 hour period)

Counts show that a significant number of trucks currently use N. Triphammer Road, and the reasons are clear. It is a direct extension of Route 34, without having to “jog” to the west at the overlap with Route 34B, and it passes directly through the retail area around Route 13, where a full diamond interchange exists. However, there are residences along the road. Refer to the next section on Route 34. There was only one comment from the public concerning traffic on N. Triphammer Road, while several residents suggested making N. Triphammer Road a truck alternate to Route 34.

Alternative #1: Designate N. Triphammer Road as a “no through trucks – local delivery only” route. Trucks would be forced to stay on Route 34.

Alternative #2: Seek ways to try to reduce truck travel, such as coordinating with trucking firms to use preferred routes, posting signs that encourage preferred routes and enticing firms to relocate distribution centers to locations that are more convenient to proper truck routes.

Alternative #3: Make N. Triphammer Road a truck route. Signing would be needed along Route 13, Route 34 and Route 34B to promote N. Triphammer Road as a truck route. The road will need to be improved to be able to handle the heavier truck traffic. Improvements would include, but not be limited to, widening shoulders and travel lanes and improving intersection turning radii.

- *Fall Creek Road* (591 trucks over 24 hour period)

Fall Creek Road is used frequently by truckers to avoid the Village of Dryden when traveling to Cortland and I-81, with a dramatic increase occurring during recent road construction around Dryden. This has caused concern for some residents of Freeville. Fall Creek Road provides a direct connection between McLean and Route 366, as well as providing access to the local businesses in the McLean area. Fall Creek Road is classified as a minor arterial. There are no alternatives to truck travel in this area – they must pass through either the Village of Dryden or the Village of Freeville. Upgrading Fall Creek Road and making it an official truck route would serve to distribute the truck traffic between the two villages.

Alternative #1: Make Fall Creek Road a truck route. Signage would be needed in that area to promote Fall Creek Road as a truck route. However, Fall Creek Road, northeast of McLean, should be signed as No Thru Trucks/Local Deliveries Only to ensure trucks use Peruville Road/Salt Road/Route 222 to access Cortland County. The road will need to be improved to be able to handle the heavier truck traffic. Improvements would include, but not be limited to, widening shoulders and travel lanes and improving intersection turning radii.

Alternative #2: Seek ways to try to reduce truck travel, such as coordinating with trucking firms to use preferred routes, posting signs that encourage preferred routes and enticing firms to relocate distribution centers to locations that are more convenient to proper truck routes.

Alternative #3: Post “No Through Trucks – Local Deliveries Only” on Fall Creek Road. This would force trucks to stay on Route 13, or use NY Route 38 north to Peruville Road (bypass to Groton), to travel to Cortland.

Alternative #4: Conduct more detailed studies to find a long-term solution to trucks in this area.

#### **N.Y.S. highways that are not well suited for trucks:**

- *Route 89* (89 trucks over 24 hour period)

Route 89 provides access to a State Park and has recently been proposed for scenic byway designation. Bicycle and pedestrian traffic correspondingly exists along Route 89. The road has relatively narrow shoulders and no clear zones, which could lead to conflicts with pedestrians and bicyclists. Clear zones are areas from the edge of the traveled road that are clear of all unyielding objects (i.e., trees, signs, poles), and appropriately graded and sloped so that a vehicle leaving the road would not severely lose control or hit a fixed object.

Alternative #1: Route 96 can be promoted, through signing, as an alternate truck route to Route 89. This will encourage trucks to use Route 96 instead of Route 89, which should result in relatively low impacts, due to low truck volumes on Route 89. Route 96 runs parallel to Route 89 and it is classified as a minor arterial.

- *Route 34* (393 trucks over 24 hour period)

Route 34 (East Shore Drive) has recently been proposed for scenic byway designation. It has narrow shoulders, no clear zone, grade changes and sharp curves, which could lead to conflicts with pedestrians and bicyclists. Twenty-three residents expressed concern with truck traffic on this road.

Alternative #1: Seek ways to try to reduce truck travel, such as coordinating with trucking firms to use preferred routes, posting signs that encourage preferred routes and enticing firms to relocate distribution centers to locations that are more convenient to proper truck routes.

Alternative #2: Make N. Triphammer Road a truck route promoted as an alternate truck route to Route 34. Signing would be needed along Route 13, Route 34 and Route 34B to promote N. Triphammer Road as a truck route. N. Triphammer Road runs parallel to Route 34 and it is classified as a minor arterial. N. Triphammer Road also provides a direct connection with Route 34 (north of Route 34B) and it is currently scheduled for reconstruction. Signing is needed to promote N. Triphammer Road as a truck route. The road will need to be improved to be able to handle the heavier truck traffic. Improvements would include, but not be limited to, widening shoulders and travel lanes and improving intersection turning radii. Intersection improvements should also be made to the intersection of N. Triphammer Road/Route 34B/Route 34 to make a direct connection for all three of these highways.

Alternative #3: Move Route 34 designation from East Shore Drive to N. Triphammer Road, and make N. Triphammer Road an official truck route (see Alternative #2). Designate East Shore Drive as a “no through trucks – local delivery only” route.

- *Route 96B/Clinton Street*

Clinton Street (Route 96B) between Route 13 and S. Aurora Street in the City of Ithaca is a residential area, as well as a city street. Seven residents expressed concern with trucks on this road, and the route was brought up at Public Meeting #1.

Alternative #1: Sign S. Aurora Street as a truck route up to Route 79 (Seneca Street), where trucks can use Route 79 as a connection to Route 13. S. Aurora Street and Route 79 are both classified as minor arterials. The Route 96B designation should be removed from Clinton Street and continued on Aurora Street to Route 79, where Route 96 B would end. Signing would be needed to direct trucks to use Seneca Street and Green Street to and from S. Aurora Street, instead of Clinton Street. This would include signing S. Aurora Street as the Route 96B truck route all the way to Route 79 (Seneca and Green Streets). There is also a bridge that crosses over Green Street, near the intersection of Green Street with S. Aurora Street, which has a clearance of 14’3”. The clearance of this bridge should be included in the signing and consideration should be given for increasing the clearance upon the replacement of this bridge. The bridge is currently in the ITCTC Transportation Improvement Program (TIP) and is scheduled for rehabilitation work. Buffalo Street, in the City of Ithaca, between Route 13 and S. Aurora Street, should also be signed as “No Through Trucks - Local Deliveries Only” to ensure that trucks do not deviate from S. Aurora Street and Route 79.

Alternative #2: Seek ways to try to reduce truck travel, such as coordinating with trucking firms to use preferred routes, posting signs that encourage preferred routes and enticing firms to relocate distribution centers to locations that are more convenient to proper truck routes.

- *Route 366 /Ithaca Road (496 trucks over 24 hour period)*

Currently trucks are using Ithaca Road, Ellis Hollow Road/Mitchell Street and Pine Tree Road as connectors between Route 366 and Route 79. The Cornell University campus is the major shipping/receiving point in this area, so it would be beneficial for trucks to have the most direct connection possible from Route 79. Thirty-two residents expressed concern with trucks on Route 366/Ithaca Road. Specifically, the western portion of Route 366 (Ithaca Road) is hilly and residential in nature.

The abandoned railroad bridge that crosses Route 366 near Varna has a low clearance (13’8”), and is contributing to the lower volumes of trucks on this section of Route 366. This bridge is currently planned as part of the future trail system. This bridge should be scheduled for replacement with a higher clearance. A pedestrian bridge may be more suitable for this location.

Alternative #1: Use of Pine Tree Road as a truck route was discussed earlier. It is classified as a minor arterial and has fewer adjacent residences than Ellis Hollow Road/Mitchell Street and Ithaca Road, it would also divert some of the truck traffic away from Ellis Hollow Road/Mitchell Street and Ithaca Road. Ellis Hollow Road/Mitchell Street should be signed as

a “No Through Trucks - Local Deliveries Only” to ensure that trucks use Pine Tree Road, Route 79, and Route 366.

Alternative #2: Cornell University should continue to coordinate with all of the trucking firms that deliver to the campus on which routes they should be using. The main route that should be used to access the campus is Route 13 to Route 366. This would keep the trucks on New York State roads and away from dense residential areas, including streets in Cayuga Heights.

Alternative #3: Post signs that encourage trucks that do business in downtown Ithaca, to stay on Route 13, rather than use Route 366 as a short cut. This will help to divert some trucks from Ithaca Road and onto Route 13, which is an arterial that is designed to handle heavy trucks. Variable message or flashing signs could be employed to increase awareness.

Alternative #4: Seek ways to try to reduce truck travel in the areas, such as coordinating with trucking firms to use preferred routes, and entice firms to relocate distribution centers to locations that are more convenient to proper truck routes.

Alternative #5: Conduct more detailed studies to find a long-term solution to trucks in this area, which could involve consideration of new road links between Route 79, Route 366 and Route 13.

- *Route 327 (12 trucks over 24 hour period)*

Route 327 is a N.Y.S. highway, which has a number of steep grades and sharp curves. Approximately 12 trucks a day are using this roadway. It provides a short-cut between Route 79 and Routes 34/96 to the south.

Alternative #1: Sign trucks to stay on Route 79 and Route 13, as alternatives to Route 327. Route 79 and Route 13 are both arterials and are more suitable for trucks than Route 327.

Alternative #2: Seek ways to try to reduce truck travel, such as coordinating with trucking firms to use preferred routes, posting signs that encourage preferred routes and enticing firms to relocate distribution centers to locations that are more convenient to proper truck routes.

- *Route 13A*

Route 13A runs through a residential area and the road is narrow in some areas. It serves as a short-cut route between Route 79 and Route 13 to the south.

Alternative #1: Route 13 be signed and used as an alternative to Route 13A. Route 13 is a principal arterial and runs parallel with Route 13A. The only improvement needed to make this alternative feasible is signing to promote Route 13.

Alternative #2: Seek ways to try to reduce truck travel, such as coordinating with trucking firms to use preferred routes, posting signs that encourage preferred routes and enticing firms to relocate distribution centers to locations that are more convenient to proper truck routes.

### Concerns of Shipper/Receivers, Carriers, Highway Superintendents, Residents:

- *Getting around the colleges / narrow roads* - Narrow roads are typical of colleges, and designed to reduce vehicle speeds and increase pedestrian safety. It is unlikely that significant modifications to the roads on the college campuses will take place, but these efforts would need to be undertaken by the colleges themselves.
- *Poor pavement condition on Portland Point Road and Millard Hill Road in Newfield* - Pavement on these roads could be upgraded or reconstructed to handle heavy vehicle traffic.
- *Getting truckers to use Route 13 to Route 366 to get to Cornell to avoid State Street* - See the previous section on Route 366/Ithaca Road. According to the major shipper/receiver and carrier survey results, Cornell University is trying to get coal trucks coming from the south to take Route 13 around the City of Ithaca and then use Route 366 to access the campus. This is intended to steer trucks away from the city and using roads like Ithaca Road and State Street (Appendix B).
- *Bridge postings/restrictions on several roads* - The State or municipalities should undertake projects to remove these bridge restrictions on roads that become part of the official truck routes, and on roads that will require truck travel for local deliveries.
- *Congestion and confusing travel patterns within the City of Ithaca* - Congestion in the City of Ithaca is an issue that is beyond the scope of this study. If a truck route system is developed and implemented, improved signing can assist truckers to more easily navigate around the City.
- *Confusion with the meaning of the “no trucks except local delivery” restrictions* - As part of a truck route system, a trucker/shipper/carrier education system could be implemented to explain and better inform truck drivers on the truck laws, issues, and signs.
- *Intersection of Route 222 and Route 38*

There are a number of trucks traveling through the Village of Groton because both Route 222 and Route 38 intersect in the Village. This intersection is a problem for trucks; also trucks traveling along Route 222 into Groton encounter a steep grade.

Alternative #1: Truck bypasses could be created around Groton to connect Route 222 and Route 38. The northern bypass would use Old Stage Road and the southern bypass would use Peruville Road, which is a minor arterial, and Salt Road. Old Stage Road and Salt Road would need to be upgraded and rehabilitated to handle the heavier truck traffic. This would include but not be limited to widening shoulders and travel lanes, improving intersection turning radii, adding turn lanes on Route 38 and the two bypass roads, possibly adding traffic signals, and reclassifying these roads as major collectors or minor arterials. Coordinated signing would be needed within Tompkins County, Cortland County, Cayuga County, and NYSDOT along Route 38, Route 34B, Route 366, and Route 222 to promote the bypasses. Old Stage Road, east of Salt Road, would need to be signed as “No Through Trucks - Local Deliveries Only” to ensure that trucks do not deviate from the designated truck routes.

Alternative #2: Allow trucks to travel as they are currently are. Intersection (auxiliary lanes, larger turning radii) and signal improvements would need to be implemented at the Route 222 and Route 38 intersection.

- *Buffalo Street, S. Albany Street, and Hudson Street in the City of Ithaca*

#### *Buffalo Street*

Buffalo Street trucks are addressed in the Clinton Street alternatives, discussed previously.

#### *S. Albany Street*

The City of Ithaca is currently conducting a more detailed study of this area. Consideration should be given to maximizing the trucks movements along the one-way pair of Seneca Street and Green Street to minimize truck impacts in this area.

#### *Hudson Street*

Alternative #1: Hudson Street provides the shortest access to downtown Ithaca, rather than taking Coddington Road to Route 96B. Placing signs, which direct trucks to use Coddington to Route 96B, at the intersection with Hudson Street, would help reduce trucks on Hudson Street. Making intersection improvements at Hudson and Coddington, to prioritize the traffic movement to stay on Coddington, should help the situation.

### **Concerns voiced by the public at Public Meeting #1:**

- *Trucks are doing a lot of damage to the roads* – Once a truck route system is designated, NYSDOT and municipalities can incorporate pavement upgrades into their capital improvement programs. See section below for more detail on weight restrictions.
- *Need to get trucks off residential roads* – Implementation of a truck route system should help to reduce the number of trucks on residential roads.
- *Concerns with pass through truck traffic* – The truck origin/destination survey revealed that only 6% of the daytime truck traffic in Tompkins County were just passing through. 94% of the trucks had business somewhere within Tompkins County. Further analysis and data is needed to determine 24-hour pass-through trucks in the County.
- *Need for better enforcement* – When a truck route system, and corresponding ordinances are in place, education programs can be implemented, plus other effective tools can be provided to local law enforcement to detect truck violations. This should results in an improvement of enforcement of truck laws. It is equally important to provide education to the residents so that they understand what trucks are and are not permitted to do. See section below for more detail.
- *Sounds levels, especially from “jake brakes”* – Ordinances can specify noise limits, and restrict the use of “jake brakes”, by time of day. Better monitoring tools can be provided to local law enforcement to help detect noise violations. See section below for more detail.

- *Truck traffic on roads with low clearance bridges such as RT. 366 and Judd Falls Road* – The low clearance bridges have been identified in this report. Once the truck route system is designated, improvements, including building new bridges with higher clearances, can be added to the various capital improvement programs.

### **Policy/Strategy/Enforcement Alternatives**

There were several issues that were expressed as general concerns, rather than concerns at specific locations. While many of these same issues have been discussed in previous sections, or specific locations, this section presents policy, strategy and enforcement-related recommendations relating to the more general concerns.

- **Develop a County-Wide Truck Route System**

Once decisions are made as to which roads are appropriate for trucks, and which roads should have trucks restricted, an official County-Wide Truck Route System must be developed. This system must be supported by official and consistent ordinances, consistent and effective enforcement, and a well-developed and easily implemented education system. The system should take the final recommendations of this report into account, as well as any more detailed follow-up studies. The system must connect with truck routes outside of the Tompkins County border, and must support any truck initiatives of adjacent counties. It is suggested that a “Truck Route Committee” be formed, which includes appropriate representative from each of the municipalities and from the City and County, to develop and finalize this County-Wide Truck Route System. Periodic reviews of this system must occur in order to “fine tune” the system, and respond to any temporary or permanent changes in truck patterns. Formation of a “County-Wide Truck Advisory Council”, made up of representatives from the towns, villages, city, trucking firms, shippers, receivers, and residents, should be formed to perform this fine-tuning, develop and implement an education program, and monitor the entire truck system.

- **Ordinances**

Once the County-Wide Truck Route System is developed, it is critical that the system be supported by consistent ordinances in each municipality. The “Truck Route Committee” could assist in the writing of these ordinances. The ordinances must define what the various routes and restrictions mean, what the penalties will be for violations, and must be enforceable. The penalties must be severe enough to deter violations, but not too severe that they drive businesses out of the region. These ordinances must then be adopted by each town, village and city. *Appendix E* contains a copy of an ordinance that was adopted by the Town of Danby, although different versions of ordinances should be obtained from municipalities outside of the region, and reviewed.

- **Signing System**

An effective, consistent truck route signing system throughout the county should be implemented to ensure and encourage trucks to use the recommended truck routes. Fixed and Variable Message Signs (VMS) should also be used to disseminate information to trucks about road conditions ahead, such as steep grades, inclines, sharp curves, and alternative routes, in applicable locations. These signs can also be employed to help truckers to recognize and remember changes in truck routes.



- **Enforcement**

A theme that occurred repeatedly in comments was inconsistent enforcement. One significant reason behind this is the lack of consistent truck routes and ordinances. However, the lack of understanding and effective enforcement tools is likely equally to blame. The following section address four enforcement categories, and suggest other enforcement tools that might be further researched.

*Route Enforcement*

Once the County-Wide Truck Route System is adopted, route enforcement will become critical. Of all of the key enforcement issues, route enforcement is the most visible to the public. After implementation, a “grace” period could be implemented, where police warn truckers and educate them on changes. Once this grace period expires, video enforcement could be used in selective areas where problems with violations occur. This technique has proven to be extremely effective in curbing violations of truck route restrictions, but it can also be helpful in promoting some “unenforceable” route changes.

In several instances, alternative routes to state highways will be promoted as truck routes, even though they will result in slightly longer travel times. Trucks cannot be restricted from the state highways, so the cooperation of the truckers is needed in order for the alternatives to be effective. In addition to variable message signs, video can be used determine if specific truckers or shipping/receiving firms are supporting the alternative or not, then education programs or meetings can occur with the specific firms in order to promote cooperation.

*Speed Enforcement*

One of the concerns raised by residents was the number of trucks speeding in the area. It is unknown whether trucks are indeed speeding, as little hard data on speeding exists, and the bigger trucks may create a perception of higher speeds. There are many speed enforcement tools available to police today. These can be employed at specific locations where violation reports are made. In the future, the use of mobile camera systems to assist in speed enforcement should be explored, if New York State law permits the use.

*Weight Enforcement*

Another concern raised by residents was overweight trucks. The New York State Troopers have begun using Weigh in Motion (WIM) devices to assist in determining commercial vehicle weights. WIM devices enable troopers to identify overweight vehicles by using sensors embedded in the roadway that transmit to a laptop computer. This saves the troopers from stopping and weighing each vehicle that passes. Increased use of this technology in Tompkins County is essential in enforcing this issue. Specific locations for implementation can be identified based on violation reports, and monitoring by the highway superintendents. This violation system can be potentially automated.

*Noise Enforcement*

The noise levels coming from trucks, especially from the “jake” brakes, were brought up during the resident survey. “Jake” brake is an engine braking system that adds additional braking power to the trucks, and reduces wear on the mechanical brake system. This engine braking system is an important safety feature for trucks, especially for those with heavy loads that must travel down hills, and should not be discouraged. According to Section 386 of the New York State Traffic Law, vehicles over 10,000 pounds must not

exceed 86 decibels while traveling at 35 MPH or less. Vehicles over 10,000 pounds must not exceed 90 decibels while traveling over 35 MPH. While these levels may not be acceptable to some residents, it is State law, and trucks are within their rights to generate this amount of noise. Increased enforcement of this law is needed countywide and to ensure trucks using “jake” brakes are staying in the acceptable decibel range. Where complaints are registered, noise monitoring equipment could be temporarily installed, along with either video or officer monitoring to document the violators.

- **Trucker/Shipper/Carrier/Public Education Program**

One of the most critical reasons for truck complaints actually stems from a lack of information concerning trucks and what they are permitted to do. Truckers and shippers/receivers may not be aware of truck routes and other restrictions, and must be informed of ordinances and threshold values for noise and weight. They must also be made aware of violation penalties, and consistently penalized for violations. Residents must equally be made aware of the laws and thresholds. Trucks are permitted to take certain routes, be certain weights, and generate a certain amount of noise. The residents may not agree, and wish to remove all trucks from certain roads, but that is not realistic. Perhaps if they were made more aware of what the trucks were allowed to do, there might be fewer complaints. The County-Wide Truck Advisory Council should be charged with developing and implementing this education program. It may take the form of brochures, direct meetings with companies and individuals, a web site, open forums, and others.

### **3.4 Impacts of Railroad Movements through the County**

The Norfolk Southern Railroad has one train a day running through Tompkins County, Sunday through Thursday. In addition they have one to three trains a week delivering coal to AES/Milliken Station. Norfolk Southern identified their primary business in Tompkins County is delivering coal to AES/Milliken Station and Cornell University, as well as shipping salt out of Cargill Inc. Since the average number of trains running in Tompkins County is less than two a day from Sunday through Thursday, this has minimal delay impacts on the current roadway system. These trains are a benefit to the area because they help to reduce the number of trucks on the roads. One railcar can handle 100 tons of coal, salt, etc, when one truck can only carry 20 to 25 tons. For example, a 20 car train is equivalent to 80-100 large trucks. However, it takes much more time to transfer between modes, which often makes rail shipping not cost-effective for many firms. In addition, reports of problems with railroad companies has deterred many shippers and receivers from using rail.

The railroad activities in Tompkins County should continue to be monitored and any opportunities to increase rail usage should be pursued to enhance the current multi-modal freight system. Economic studies have shown that it is more cost-effective for shippers and receivers to use trucks, rather than rail, up to certain bulk and weight thresholds. Commodities such as coal are shipped in enough bulk and weight to be economically justified. However, it is not anticipated that rail shipping in Tompkins County will appreciably increase in the near future.

### **3.5 Second Public Meeting**

The second public meeting was held on Thursday, May 3<sup>rd</sup> from 6:30 PM – 8:30 PM at the Tompkins County Library. The purpose of this meeting was to provide the public the opportunity to provide input and voice concern with the alternatives for the truck routing system. The concerns voiced by the public included:

- The need for some additional count data where alternatives are being proposed;
- The bridge clearance on Pine Tree Road if it is used as truck route; and
- The number of trucks using Ithaca Road and Mitchell Street in the City of Ithaca.

Five people attended the second public meeting, which was a lower number than was envisioned. The input received can be found in *Appendix F*.

## CHAPTER 4 – Impacts of Truck Movements and Alternatives

### 4.1 Introduction

This chapter focuses on the impact of truck traffic throughout the County, and qualitatively assesses the potential impacts of the alternatives described in Chapter 3. Areas where high truck impacts are currently occurring are identified. Finally, the potential impacts of the alternatives presented in Chapter 3 are summarized in an Evaluation Matrix (Table 3), and described in more detail, where appropriate. It is important to note that alternatives discussed and analyzed in Chapters 3 and 4 are not recommendations, but rather alternatives for comparison. Recommendations are not made until Chapter 5.

### 4.2 Cost of Alternatives to Truckers

Costs incurred or saved by truckers traveling over alternate routes were assessed using a per-mile cost factor. The FHWA's Comprehensive Truck Size and Weight (TS & W) Study was used as a reference to find a per-mile cost factor. The cost factor used for this assessment was based on a standard 5-axle 48' foot tractor-trailer at 108.1 cents per mile. These estimates show the costs incurred for one truck trip for each alternate route. The estimates do not depict the cost impacts that a company could face if they were operating a number of trucks per day along each route or if trucks encounter more than one alternate route as they are traveling throughout the county. They also do not account for any additional signal or congestion-related delays. These scenarios would create a greater financial impact to the trucking firms. The cost assessment for each alternative is listed below:

- ***N.Y.S. Route 89***  
Existing cost =  $108.1 \times 10 \text{ miles} = \$10.81$   
Alternative cost (Route 96) =  $108.1 \times 11.5 \text{ miles} = \$12.43$   
Cost incurred = \$1.62
- ***N.Y.S. Route 327***  
Existing cost =  $108.1 \times 7 \text{ miles} = \$7.57$   
Alternative cost (Route 79 & Route 13) =  $108.1 \times 10 \text{ miles} = \$10.81$   
Cost incurred = \$3.24
- ***N.Y.S. Route 13A***  
Existing cost =  $108.1 \times 2.2 \text{ miles} = \$2.38$   
Alternative cost (Route 13) =  $108.1 \times 2.8 \text{ miles} = \$3.03$   
Cost incurred = \$0.65
- ***N.Y.S. Route 96B- Clinton Street (between Route 13 and S. Aurora Street)***  
Existing cost =  $108.1 \times 0.8 \text{ miles} = \$0.86$   
Alternative cost (Aurora Street & Route 79) =  $108.1 \times 0.8 \text{ miles} = \$0.86$   
Cost incurred = \$0.00
- ***N.Y.S. Route 222 (between Route 38 and Salt Road)***

Existing cost =  $108.1 \times 5.3 \text{ miles} = \$5.73$

Alternative cost (Salt Road & Peruville Road) =  $108.1 \times 5.1 \text{ miles} = \$5.51$

Cost savings = \$0.22

Existing cost =  $108.1 \times 3.35 \text{ miles} = \$3.62$

Alternative cost (Old Stage Road) =  $108.1 \times 3.1 \text{ miles} = \$3.35$

Cost savings = \$0.27

- ***N.Y.S. Route 34***

Existing cost =  $108.1 \times 6.1 \text{ miles} = \$6.59$

Alternative cost (Triphammer Road) =  $108.1 \times 6.1 \text{ miles} = \$6.59$

Cost incurred = \$0.00

- ***Pine Tree Road/Ellis Hollow Road***

Existing cost (Ellis Hollow Road) =  $108.1 \times 7.5 \text{ miles} = \$8.11$

Alternative cost (Pine Tree Road) =  $108.1 \times 7.25 \text{ miles} = \$7.84$

Cost savings = \$0.27

Existing cost (Ithaca Road) =  $108.1 \times 1.1 \text{ miles} = \$1.19$

Alternative cost (Pine Tree Road) =  $108.1 \times 3.2 \text{ miles} = \$3.46$

Cost incurred = \$2.27

- ***Fall Creek Road (between McLean and Cortland County)***

Existing cost (McLean to Cortland County using Fall Creek Road) =  $108.1 \times 5.9 \text{ miles} = \$6.38$

Alternative cost (McLean to Cortland County using Peruville Road/Salt Road/Route 222) =  $108.1 \times 12.0 \text{ miles} = \$12.97$

Cost incurred = \$6.59

### **4.3 Impacts of Alternatives on Local Businesses and Shippers**

Businesses and shipping companies located in Tompkins County or servicing the County are primarily using N.Y.S. highways. Trucks can not be prohibited from using N.Y.S. Highways; therefore local businesses and shippers will only be impacted on the non-state roads where alternatives have been considered, as shown in *Figures 8a and 8b*. There may be increased trip lengths associated with the proposed changes, as detailed in Section 4.2. Local businesses and shippers are permitted to travel on local roads, even if they are signed for No Trucks, if making a pick-up or delivery. While there may often be additional costs due to increased travel times or distances as a result of some of the truck route alternatives, the violation penalties should be great enough so that making the routes changes would be more cost-effective.

Columns 1, 2 and 3 of the Evaluation Matrix (Table 3) presents a qualitative assessment as to the impacts to local businesses, shippers and truckers. The words “impact” and “benefit” are used to designate effects which are relatively significant. “Slight” is used to signify that the impact or benefit is noticeable, but will not have a significant long-term effect. “High” signifies that the impacts or benefits may be of such magnitude that major changes in operations may be necessary to adapt to the alternative, or that an impact will generate a large cost increase, which may effect profit, operations, and perhaps even long-term viability of a business in the greater Ithaca area. “Moderate” is somewhere in between.

**Table 3**  
**EVALUATION MATRIX**  
Tompkins County Freight Study

+++	Benefit	-	Slight Impact
+	Slight/Moderate Benefit	--	Moderate Impact
	No Impact/Not Applicable	---	High Impact

Possible Solution	Truckers	Local Businesses	Shippers	Residents on Route	Parallel Route Residents	Implementation Costs	Maintenance Costs	Municipal Services	Enforcement Resources
<b>Pine Tree Road</b>									
Alternative #1 - Make Truck Route	+	+	+	---	+	---	-		
Alternative #2 - Truck Reduction Policies	-		-	+		-	+	-	-
Alternative #3 - No Through Trucks	-	-	-	+	--	-			
Alternative #4 - Studies of New Links								-	
<b>Ellis Hollow Road / Mitchell Street</b>									
Alternative #1 - No Through Trucks	--	-	--	+	--	-			
Alternative #2 - Truck Reduction Policies	-		-	+		-	+	-	-
Alternative #3 - Make Truck Route	+	+	+	---	+	---	-		
<b>N. Tripphammer Road</b>									
Alternative #1 - No Through Trucks	--	-	-	+	--	-			
Alternative #2 - Truck Reduction Policies	-		-	+	-	-	+	-	-
Alternative #3 - Make Truck Route	+			--	+	---	-		
<b>Fall Creek Road</b>									
Alternative #1 - Make Truck Route	+	+	+	-	+	---	-		
Alternative #2 - Truck Reduction Policies	-		-	+		-	+	-	-
Alternative #3 - No Through Trucks	--	-	-	+	--	-			
Alternative #4 - Studies of New Links								-	
<b>Route 89</b>									
Alternative #1 - Promote Rt. 96 as Truck Rt.	-			+	-	-	+		
<b>Route 34</b>									
Alternative #1 - Truck Reduction Policies	-		-	+	-	-	+	-	-
Alternative #2 - N. Tripphammer Rd. Truck Rt.	+			+	-	---	-		
Alternative #3 - Make N. Tripphammer Rt. 34	+			+++	--	---	+		



**Table 3 (continued)**  
**EVALUATION MATRIX**  
Tompkins County Freight Study

+++	Benefit	-	Slight Impact
+	Slight/Moderate Benefit	--	Moderate Impact
	No Impact/Not Applicable	---	High Impact

Possible Solution	Truckers	Local Businesses	Shippers	Residents on Route	Parallel Route Residents	Implementation Costs	Maintenance Costs	Municipal Services	Enforcement Resources
<b>Route 96B / Clinton Street</b>									
Alternative #1 - Truck Route on Rt. 79		-		+++	-	--	-		
Alternative #2 - Truck Reduction Policies	-		-	+	-	-	+	-	-
<b>Route 366 / Ithaca Road</b>									
Alternative #1 - Pine Tree Rd. as Truck Rt.	+	+	+	---	+	---	-		
Alternative #2 - Change Cornell Deliveries	-	-	-	+++	-	-	+	-	
Alternative #3 - Sign Trucks to Stay on 13	-	-		+		-	+		
Alternative #4 - Truck Reduction Policies	-		-	+		-	+	-	-
Alternative #5 - Studies of New Links								-	
<b>Route 327</b>									
Alternative #1 - Sign trucks to stay on 79 + 13	-					-	+		
Alternative #2 - Truck Reduction Policies	-		-	+		-	+	-	-
<b>Route 13A</b>									
Alternative #1 - Sign trucks to stay on 13	-			+	-	-	+		
Alternative #2 - Truck Reduction Policies	-		-	+		-	+	-	-
<b>Routes 222 and 38</b>									
Alternative #1 - Build bypass around Groton	+	-		+++	-	---			
Alternative #2 - Truck Reduction Policies	-		-	+		-	+	-	-
<b>Buffalo Street</b>									
Alternative #1 - Seneca/Green Truck Routes				+	-	--	-		
Alternative #2 - Improved signs to Green St.	+			+	-	-			
Alternative #3 - No Through Trucks	-	-		+++	--	-			
<b>Hudson Street</b>									
Alternative #1 - Improve Coddington				+		--			
Alternative #2 - No Through Trucks	-			+++	-	-			

**Table 3 (continued)**

**EVALUATION MATRIX**

Tompkins County Freight Study



Possible Solution	Truckers	Local Businesses	Shippers	Residents on Route	Parallel Route Residents	Implementation Costs	Maintenance Costs	Municipal Services	Enforcement Resources
<b>Policy/Strategy/Enforcement</b>									
Regional Truck Route System	-		-	---	+++	-	+		-
Ordinances	-	-	-	+	+		+	--	
Signing System	+	+	+	-	+	-	+	-	+
Enforcement	-			+	+		+		---
Education Program	+	+	+	+	+		+	+	+
Truck Operation Changes	--	--	--	+	+	-	+		+
Improved Rail Facilities	-		+	+	+	---	+		+

#### **4.4 Identification of Significant Truck Impacts on Residential Areas**

The identification of areas of significant truck impacts on residential areas is difficult and subjective. It was not possible to count all residential streets that potentially are significant impacted by trucks, and the concerns expressed by residents may be based on fact, or perception. Also, the threshold as to what is “tolerable” changes based on the functional classification of the road, the residential density, the overall “feel” of the neighborhood, and so on. With the data available, two sources were tapped to assess these significant impact areas: surveys/input of residents and town highway superintendents, and an engineering assessment of where trucks are likely to be traveling. The following residential areas were identified as currently being significant impacted by trucks:

Valley Road/Brooktondale Road (Caroline)	Mitchell Street
Route 366 through Etna and Varna	Ithaca Road
Route 366 and 38 through Freeville	Quarry Road
Route 13 and 38 through Dryden	Seneca Street
Routes 38 and 222 through Groton	Buffalo Street
East State Street (S.R. 79)	S. Albany Street
Route 34 (E. Shore Drive)	Pine Tree Road
Ellis Hollow Road	
Roads in Cayuga Heights and Northeast Town of Ithaca (esp. Warren Road)	

#### **4.5 Impacts of Alternatives on Residential Areas**

The alternative truck routes were correlated to the functional classification system, as well as the residential density (through examination of land use patterns). There is a high correlation between functional classification and the alternative truck routes. All of the alternative truck routes are on roads that are classified as major collectors or above except for Salt Road and Old Stage Road, which are currently local roads.

The alternative truck routes tended to have the same amount or fewer residences adjacent to the roadway than the roads currently being used by trucks. N. Triphammer Road has approximately the same number of residences as Route 34. Old Stage Road, Salt Road, Peruville Road and Fall Creek Road are all more rural in nature and have a low number of residences. Pine Tree Road has fewer residences than Ellis Hollow Road/Mitchell Street and Ithaca Road. However, while the overall number of residences along Pine Tree Road may be lower than along Ellis Hollow Road, it should be pointed out that the Pine Tree Road neighborhood has a significantly higher density than that along Ellis Hollow Road. Pine Tree Road includes at least 50 houses on lots averaging about one-third of an acre just between Route 79 and Snyder Hill Road, and is designated in the Town of Ithaca Comprehensive Plan as “Suburban Residential.”

S. Aurora Street, through downtown Ithaca, has few residences, while Clinton Street is a highly residential area. The N.Y.S. highways tend to have lower residential densities excepting where they run through villages and the City of Ithaca. The residential properties and the functional classification system are displayed in *Figures 9a and 9b*.

The two residential areas that would see the biggest effect from the alternative truck routes would be the N. Triphammer Road and Pine Tree Road. Both of these roads have residential uses and the alternatives could make each of these roads trucks routes. Approximately 400 more trucks a day would use N. Triphammer Road, if all of the trucks currently using Route 34 begin using N. Triphammer Road. If all of the trucks currently using Ithaca Rd. and Ellis Hollow Rd. begin using Pine Tree Rd., it could potentially add 600 –700 trucks a day to Pine Tree Rd.

Columns 4 and 5 of Table 3 (Evaluation Matrix) presents a qualitative assessment as to the impacts or benefits to residential areas. The terms used are similar to those used in the assessment of local business and shipper impacts, but focusing on impacts or benefits to the quality of life for the residents. Noise, vibration, safety and other key factors are considered.

## **4.6 Third Public Meeting**

The third public meeting was held on Thursday, November 1<sup>st</sup> from 6:30 PM – 9:00 PM at the Tompkins County Library. The purpose of this meeting was to provide the public the opportunity to provide input and voice concern with the alternatives and potential recommendations for the truck routing system. The concerns voiced by the public included:

- Pine Tree Road should not be considered further as a truck route;
- The study did not include an examination of accident data;
- The survey did not capture evening truck pass-through traffic;
- Town of Lansing voiced opposition to designating N. Triphammer Road as a truck route;
- Trucks do, in fact, pay for the cost of road use;
- There is a need to consider a bypass road and to save land for it;
- There is no “right answer” to truck traffic – it has to be somewhere and trucks are needed;
- Impacts on Varna from additional use of Route 366; and
- There is not enough information to make educated decisions about truck routes.

59 people attended the third public meeting.

## **4.7 Road Maintenance Impacts**

Concern was expressed regarding road maintenance costs on designated truck routes. While it is beyond the scope of this study to quantify road maintenance costs, it is reasonable to expect that, with designated truck routes, overall road maintenance costs are likely to be less than if no designated truck route system existed. The number of trucks is the same with or without truck routes, but with a truck route system, there is a higher concentration of trucks on a smaller number of roads that would require upgraded pavement to handle truck traffic. Roads not on the truck route system would require less frequent and less costly maintenance. The smaller number of roads designated as truck routes would make it easier for key highway supervisors to plan and manage road maintenance.

After recommendations from this study are finalized, and a truck route system is determined, current levels of maintenance, and existing cross sections of roads can be examined, and future maintenance costs can be estimated.

**Figure 9a.**  
**Functional Class &  
Residential Density**

Legend

Urban Principal Arterial

Urban Minor Arterial

Urban Collector

Rural Principal Arterial

Rural Minor Arterial

Rural Major Collector

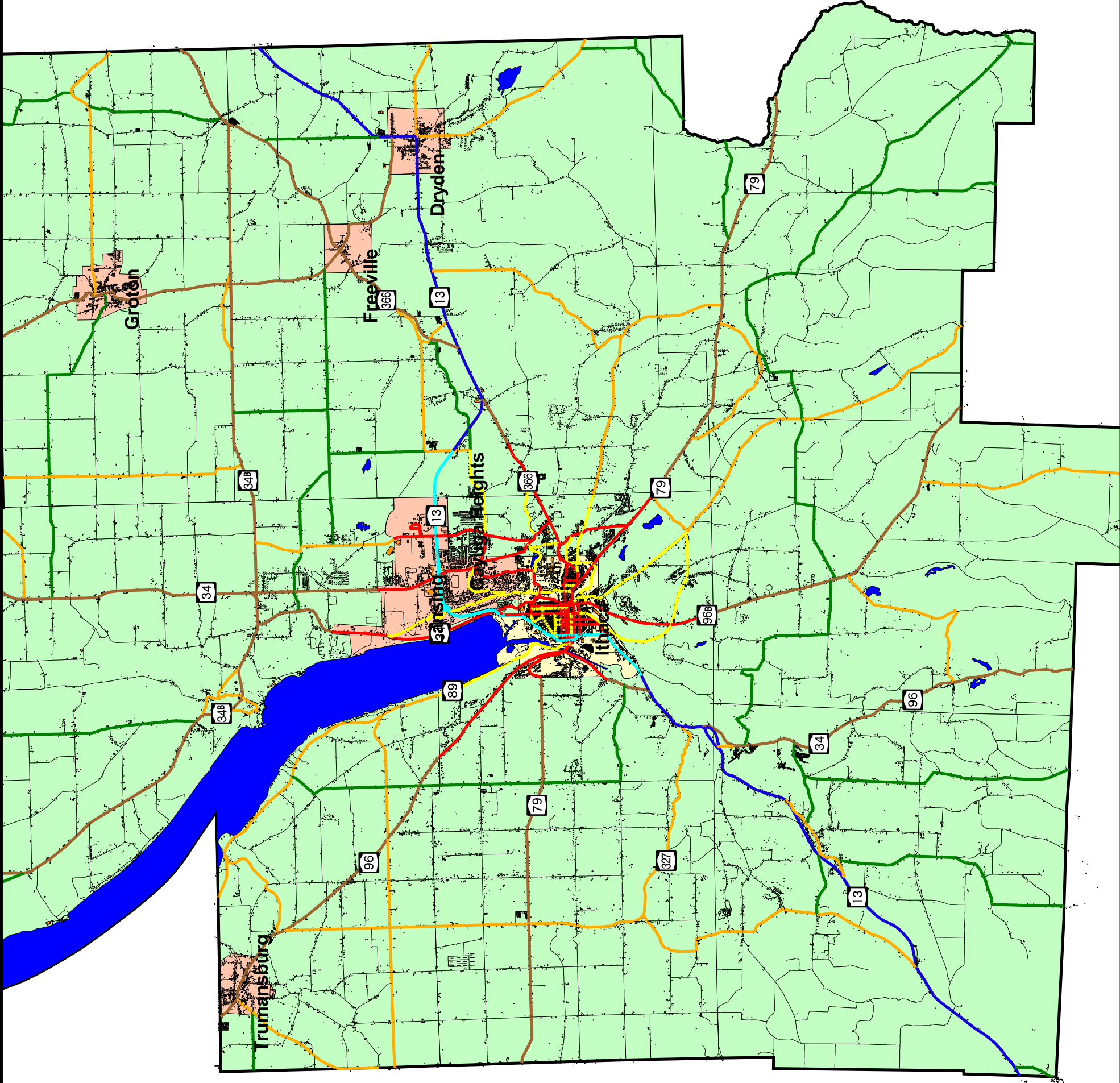
Rural Minor Collector

Tompkins County

City of Ithaca

Village Boundaries

Buildings



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Figure 9b.  
Functional Class &  
Residential Density

Legend

Urban Principal Arterial

Urban Minor Arterial

Urban Collector

Rural Principal Arterial

Rural Minor Arterial

Rural Major Collector

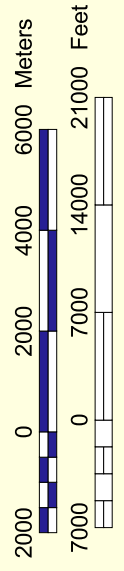
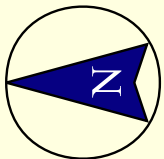
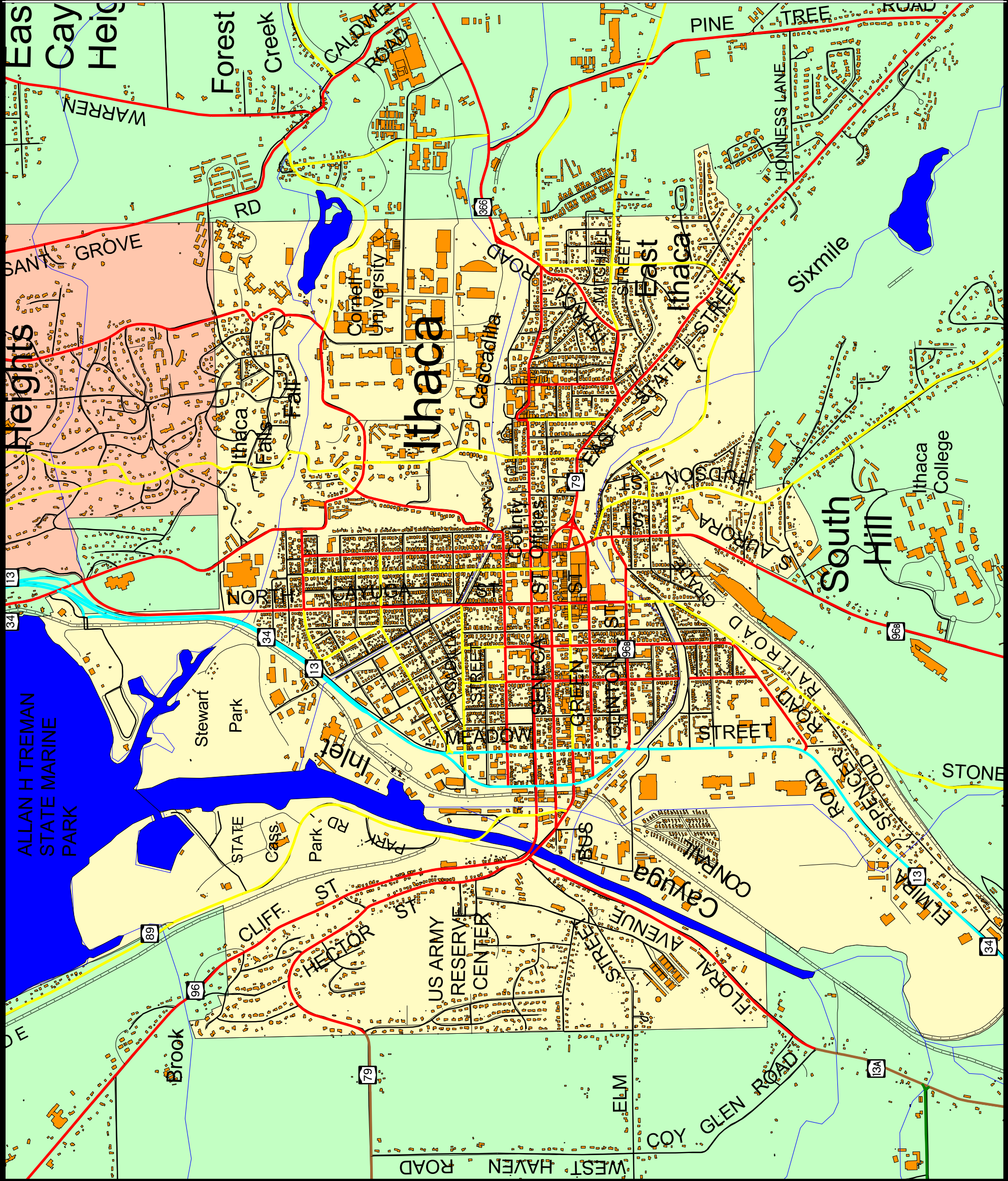
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## **CHAPTER 5 – Recommendations and Mitigation Strategies**

### **5.1 Introduction**

The goal of this Freight Transportation Study was to develop new data on freight movements throughout the County. This data was used to prepare a freight transportation plan, which provides for efficient movement of goods into, out of, and through Tompkins County, while minimizing impacts on truckers, local businesses, shippers, and residents.

To meet the study goal, the following objectives were identified:

- collect and analyze new freight movement data throughout Tompkins County (Chapter 2);
- assess the suitability of existing travel routes to handle freight movements (Chapter 2);
- determine significant areas of concern (Chapter 2);
- identify alternative truck travel routes and strategies (Chapter 3);
- assess impacts of these alternative routes (Chapter 4); and
- develop mitigation strategies (Chapter 5).

The recommendations developed and presented in this chapter result from completing these objectives. The primary recommendations revolve around the development of a system of preferred truck routes. The exact definition of a truck route will be stated in local ordinances, but typically, truck routes are defined as regional roads which trucks must take until they get as close as possible to their intended destination. At that point, trucks may use the local system. Exceptions may occur where local roads are not desired truck travel roads, so local restrictions, or alternate desired local routes can be posted. Truck routes are not meant to remove trucks from the local system, but rather keep trucks on the regional road system as long as possible. A county-wide coordinated truck route system offers many benefits, including minimization of impacts on adjacent land uses, better allocations of resources for road maintenance, and ease in facilitating enforcement.

The issue of truck movements through a community is always an extremely sensitive one - there is never one right answer. Restriction of trucks from certain roads merely relocates the impacts to other roads, with other residents. It is also important to note that restricting trucks from routes is not always the best solution, as doing so risks losing federal aid eligibility for those roads. Construction of new roads to accommodate trucks is often infeasible due to high costs, and a lack of right-of-way. Even if they are built, trucks still need to use local roads to get to their ultimate destinations. While this study identifies some solutions, which can help reduce truck impacts on certain roads, the most effective solutions may be the policy ones, which concentrate on education, enforcement, and cooperation. Trucks are necessary to the economic health of the area.

This study primarily focused on county-wide truck issues, and those on major roads. There are many localized issues that were expressed (presented in the appendix) by the highway superintendents and the residents, but resources do not permit them all to be studied in detail in this report.

Based on the data and analysis and the input received during the public involvement process, the most appropriate locations for truck routes were identified. In some areas, there are no roadways

that lend themselves to truck route designation. At other locations, more than one alternative is recommended for further consideration. Where more than one alternative was presented (discussed in Chapters 3 and 4), our recommendation may be one of the remaining alternatives, or a combination of them. In all cases, strategies should be pursued to reduce truck travel through impacted areas. These may include coordinating with trucking firms to use preferred routes, and enticing firms to relocate distribution centers to locations that are more convenient to proper truck routes.

## 5.2 Study Recommendations

The following presents the areas, identified during this study, as having issues with truck traffic. Recommendations for each of these areas are listed below. Figures 10a and 10b present maps of proposed truck routes and other changes in road designations.

- *Pine Tree Road/Ellis Hollow Road/Mitchell Street/Ithaca Road/Route 366 area*

This is a residential area, with long-standing issues with truck traffic. Based on input received throughout the public involvement process, none of the roads in the area are recommended to be designated as truck routes. Designation of any road as a truck route would result in unacceptable impacts to residential areas. Restricting trucks from routes would relocate impacts to adjacent routes.

There are three alternatives recommended for this area to help minimize truck impacts – two short-term and one long-term. In the short-term, it is recommended that major shippers and receivers continue to be encouraged to coordinate with all of the trucking firms to use preferred routes. Cornell University is the major receiver in this area. Trucks should use the state highways as much as possible, and avoid sensitive cut-through routes. This would require cooperation, as the state routes often are not the shortest paths to key destinations. While trucks would still travel on Pine Tree Road, Ellis Hollow Road and the others, the result should be a reduction of heavy trucks on these key residential roadways.

The second short-term alternative is to erect signs to encourage trucks to use the preferred truck routes. Post signs for Ithaca-bound trucks, from the north (from Cortland and Syracuse areas) to stay on Route 13, rather than use Route 366, to downtown Ithaca. Sign trucks, heading westbound for Ithaca on Route 79, from Tioga County, to use Route 38 at Richford, to Route 13 to downtown Ithaca. This route is outside of Tompkins County, so NYSDOT would need to consider and promote this solution. This route reduces the number of trucks through residential areas near Ithaca, and provides a safer route into the city (the city approach on Route 79 is narrow and steep, while Route 13 is a four lane, divided, Principal Arterial).

The long-term alternative is to conduct more detailed studies to find a long-term solution to trucks in this area, which could involve consideration of new road links between Route 79, Route 366 and Route 13. A bypass road on the east side of Ithaca has been talked about, but it would involve high costs and land acquisitions. Should a bypass route still be considered viable, consideration of right-of-way preservation should begin soon.

- *North Triphammer Road/Route 34 area*

The grades, narrow width, and recreational and scenic nature of Route 34 make it undesirable for handling high numbers of heavy trucks. North Triphammer Road, which travels through one of the main commercial/retail areas of Tompkins County, has a full interchange with Route 13, and parallels Route 34, makes sense as an alternative travel route, as it offers safety advantages by being flatter, with wider clear zones. It is recommended that N. Triphammer Road, between Route 34B and Route 13, be designated, signed and promoted as a truck route. This should reduce the truck impacts on Route 34. Improvements to N. Triphammer Road may be needed to accommodate the increase in truck traffic.

- *Freeville/Etna area*

A significant percentage of trucks traveling between Ithaca and Cortland/Syracuse travel on the Route 366 /Fall Creek Road/ McLean Road corridor through Freeville, instead of Route 13. Route 13 is much better able to handle trucks than Fall Creek Road, especially heading northeast from Freeville, where it is no longer State Route 366. It is recommended that Route 13 be signed and promoted as a truck route between Ithaca and Cortland, rather than Route 366. Signs should be erected in both directions on Route 13 prior to the turn-off for McLean/Freeville, encouraging trucks to stay on Route 13. In the long-term, it is recommended that more detailed studies be conducted to further address truck movements in this area.

- *Route 96/Route 89 area*

The grades, narrow width, and recreational/scenic nature of Route 89 make it undesirable for handling high numbers of heavy trucks. Route 96 already handles more trucks than Route 89 and is a parallel route. It is recommended that Route 96 be signed and promoted as a truck route through the northwest part of Tompkins County. Signs directing trucks to use Route 96 should also be placed on Route 89 in the City of Ithaca. A more detailed study should be conducted to determine an appropriate route to direct trucks from Route 89 to Route 96 north of Tompkins County. The best route may be outside of Tompkins County, and as far away as the NYS Thruway. As a result, NYSDOT may need to pursue this, or area officials may need to coordinate with other transportation agencies or governments to implement this.

- *Groton area*

The intersection of Route 222 and Route 38 in Groton has been identified as a problem location for trucks and truck impacts. Concerns include truck turning radii, pedestrians and residential impacts. It is recommended that truck bypasses be created around Groton to connect Route 222 and Route 38. The northern bypass would use Old Stage Road and the southern bypass would use Peruville Road, which is a minor arterial, and Salt Road to Route 222. Old Stage Road and Salt Road would need to be reclassified as rural major collectors in order to be eligible for federal funding. Since local, county and state roads are involved in the recommendations, the corresponding agencies must coordinate the implementation.

- *Downtown/Route 96B area*

Many downtown streets are residential in nature. As much as possible, recommendations were made to try to keep trucks on the downtown one-way street pair of Seneca Street and Green

Street (Route 79). These roads function as the main thoroughfares in the downtown area (along with Route 13). Aurora Street is included to provide the connection from Route 96B (Clinton Street) to and between the one-way pair.

It is recommended that the Route 96B designation be removed from Clinton Street. Aurora Street should be designated as Route 96B up to Seneca Street. The one-way pair of Seneca Street and Green Street should also be designated jointly as Routes 79 and 96B. Aurora Street, Seneca and Green Streets, in this area, should be designated as truck routes.

- *Downtown/Hudson Street*

There is a concern with truck impacts on Hudson Street, between Coddington Road and downtown. For vehicles approaching the city on Coddington Road, Hudson Street provides the shortest access to downtown Ithaca, rather than taking Coddington Road to Route 96B. Placing signs, which direct trucks to use Coddington to Route 96B, at the intersection with Hudson Street, would help reduce trucks on Hudson Street. Making intersection improvements at Hudson and Coddington, to prioritize the traffic movement to stay on Coddington, should help the situation.

- *Route 327*

Route 327 has grades, which make it less desirable and less safe for trucks. Routes 79 and 13 offer viable alternatives to Route 327. Sign trucks to stay on Route 79 and Route 13, as alternatives to Route 327.

- *Route 13A*

Route 13 should be signed as an alternative to Route 13A, which is more residential in nature.

### **Policy/Strategy/Enforcement Alternatives**

The recommendations above center around the development of a truck route system. In order to be successful, the truck route system must be interconnected, effectively signed, and adequately enforced. In addition to the previous recommendations, the following policy/strategy/enforcement initiatives must be implemented (described in detail earlier in this report):

- **Develop a County-Wide Truck Route System**

An official County-Wide Truck Route System must be developed. The system should take the final recommendations of this report into account, as well as any more detailed follow-up studies. The system must be interconnected within the county, logically connected to routes in adjacent counties and must support any truck initiatives of adjacent counties.

- **Ordinances**

Consistent ordinances must be developed by each municipality. The ordinances must define what the various routes and restrictions mean, what the penalties will be for violations, and must be enforceable. These ordinances could also address hazardous materials transport. Any changes in the designation of roadway must be coordinated between municipalities.

- **Signing System**

An effective, consistent truck route signing system throughout the county should be implemented to ensure and encourage trucks to use the recommended truck routes. Signs

should be used to disseminate information to trucks and can also be employed to help truckers to recognize and remember changes in truck routes.

- **Enforcement**

- Route Enforcement*

- Methods must be implemented to ensure that designated truck routes are being followed. Video enforcement could be used in selective areas where problems with violations occur. Where alternative routes to state highways will be promoted as truck routes, and cooperation of the truckers is needed in order for the alternatives to be effective, variable message signs, and video can be used to determine if specific truckers or shipping/receiving firms are supporting the alternatives.

- Speed Enforcement*

- One of several speed enforcement tools can be employed at specific locations where violation reports are made. The use of mobile camera systems to assist in speed enforcement should be explored, if New York State law permits the use in the future.

- Weight Enforcement*

- Weigh in Motion (WIM) devices enable troopers to identify overweight vehicles. Increased use of this technology in Tompkins County is essential in enforcing this issue. Specific locations for implementation can be identified based on violation reports, and monitoring by the highway superintendents. This violation system may be automated.

- Noise Enforcement*

- Increased enforcement of the existing law is needed countywide to ensure trucks using “jake” brakes are staying in the acceptable decibel range. Where complaints are registered, noise monitoring equipment could be temporarily installed, along with either video or officer monitoring to document the violators.

- **Trucker/Shipper/Carrier/Public Education Program**

- Truckers and shippers/receivers may not be aware of truck routes and other restrictions, and must be informed of ordinances and threshold values for noise and weight. They must also be made aware of violation penalties, and consistently penalized for violations. Residents must equally be made aware of the laws and thresholds. Trucks are permitted to take certain routes, be certain weights, and generate a certain amount of noise. The program may take the form of brochures, direct meetings with companies and individuals, a web site, open forums, and others.

Proposed truck routes are illustrated on *Figures 10a and 10b*.

### **5.3 Mitigation Strategies for Residential Areas**

The policy/strategy/enforcement alternatives above should help a great deal to minimize impacts for residential areas by directing trucks along the proper paths, defining clear penalties if they don't follow the truck routes, and providing law enforcement with improved tools to catch violators. The education program will be key. Once the new systems are in place, it is important that everyone, including the truck drivers and the residents, know and understand what is and is not allowed under the new ordinances.

There are other mitigation strategies as well. Truck restriction signs can be posted on specific streets. If specific shippers or carriers are using a specific street of concern, agreements can be reached that provide incentives for the truckers to use alternate routes. These incentives can be in the form of tax breaks, economic assistance with facility relocations or upgrades, financial reimbursements to counter the lost travel time, etc. For streets where the impacts are excessive, traffic calming measures, such as speed humps, chicanes, or diverters can be installed. Finally, a neighborhood truck watch can be formed, where residents, working with law enforcement officials, can develop a system to monitor truck traffic.

## **5.4 Future Action Steps**


The following presents future action steps, leading towards implementation of the study recommendations. It is important that coordination occur with DOT, other counties or governments. It is equally important that recommendations of other regional or local studies be considered and supported, to assure an effective system that supports local and regional initiatives and goals.


- A “Truck Route Committee” should be formed, which includes representatives from each of the municipalities and from the City and County, to develop and finalize this Regional Truck Route System. The ITCTC Planning Committee would be a good “umbrella” group for this committee.
- The “Truck Route Committee” must review this report and determine if more detailed studies are needed to determine if any localized truck route additions, restrictions, modifications, and/or right-of-way preservations are needed. The studies can also look into detail on land acquisition, construction and maintenance costs.
- The “Truck Route Committee” should assist each municipality in drafting a new truck ordinance, to assure consistency throughout the Region. The ordinances must then be officially adopted.
- The “Truck Route Committee” should develop, perhaps with assistance from a consultant, an effective, consistent truck route signing system. This should include a short-term transition system, to assist truckers when the truck route system is initially implemented.
- The “Truck Route Committee” should, perhaps with assistance from a consultant, work with law enforcement to develop a new truck ordinance enforcement program and to determine the appropriate tools needed to successfully implement it.
- A “County-Wide Truck Route Advisory Council”, made up of representatives from the towns, villages, city, trucking firms, shippers, receivers and residents, should be formed to develop and implement an education program on the new truck ordinances and route system. The program should target shippers, receivers, truckers, law enforcement officers, and residents.
- The “County-Wide Truck Route Advisory Council” should monitor and fine-tune the truck route program, as needed.





Figure 10a.  
Recommended  
Truck Routes


Legend


*State Highways to be Designated as Truck Routes*


*State Highways that Trucks can Still use, but are Not to be Designated as Truck Routes (Other Routes to be Promoted)*

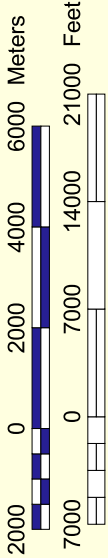
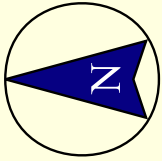
*Non-State Highways to be Designated as Truck Routes*

*Non-State Highways that Trucks can Still use, but will have Alternate Routes Promoted as Preferred Routes*

Tompkins County

City of Ithaca

Village Boundaries



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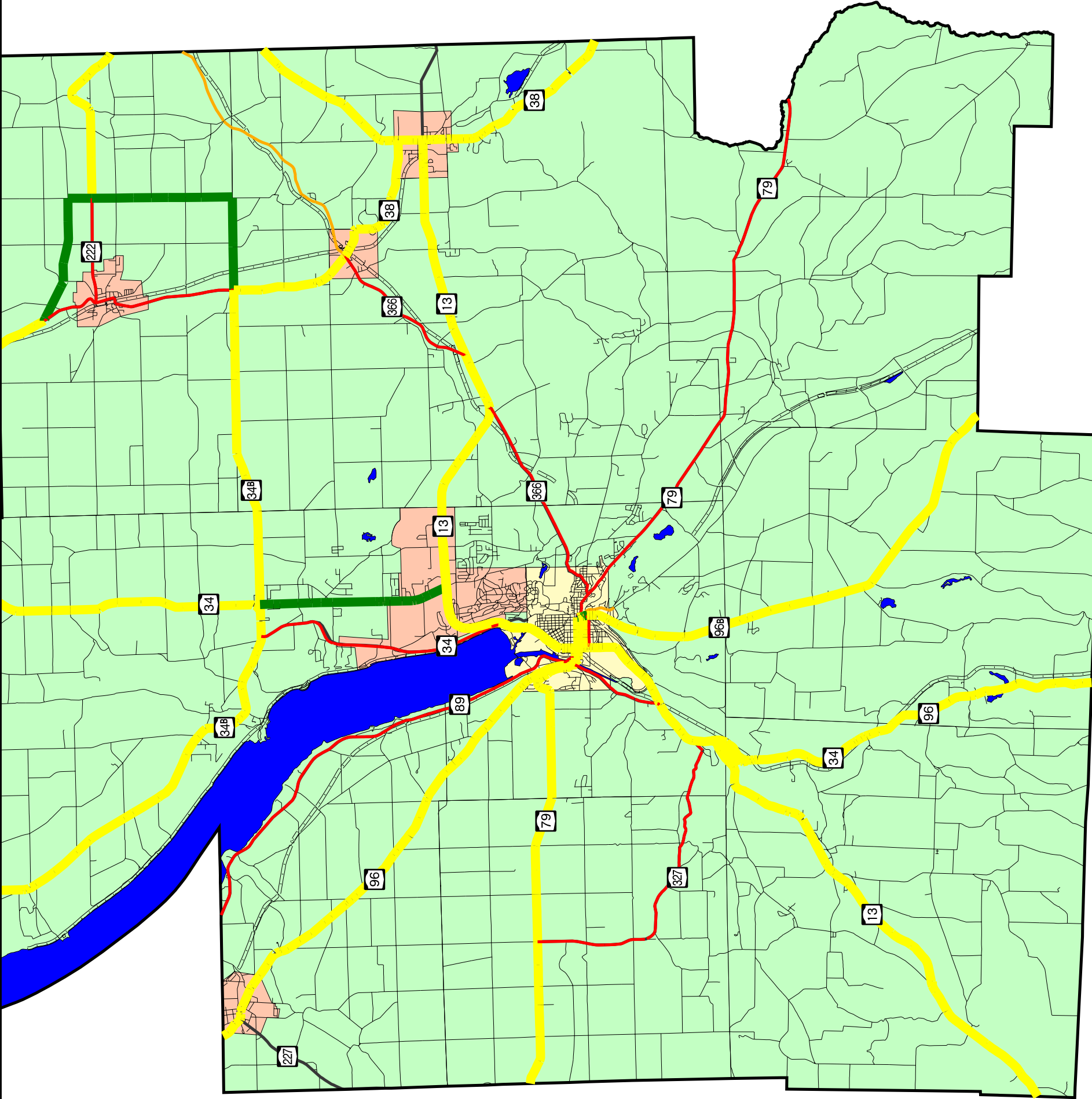






Figure 10b.  
Recommended  
Truck Routes


Legend


*State Highways to be Designated as Truck Routes*


*State Highways that Trucks can Still use, but are Not to be Designated as Truck Routes (Other Routes to be Promoted)*

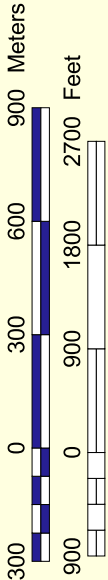
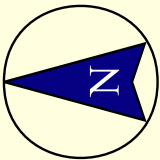
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